DOCUMENT RESUME

ED 295 759 PS 017 429

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TITLE The Classroom Strategy Study: Summary Report of General Findings. Research Series No. 187.
INSTITUTION Michigan State Univ., East Lansing. Inst. for Research on Teaching.
SPONS AGENCY Department of Education, Washington, DC.
PUB DATE May 88
NOTE 217p.
AVAILABLE FROM Institute for Research on Teaching, College of Education, Michigan State University, 252 Erickson Hall, East Lansing, MI 48824 ($19.00).
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC09 Plus Postage.
DESCRIPTORS Academic Failure; Aggression; Alienation; Attention Span; *Behavior Problems; *Classroom Techniques; Elementary Education; *Elementary School Students; *Elementary School Teachers; Hyperactivity; Low Achievement; Master Teachers; Maturity (Individuals); *Personality Problems; Rejection (Psychology); Rural Urban Differences; Underachievement; Withdrawal (Psychology)
IDENTIFIERS *Classroom Strategy Study; *Outstanding Teachers; Perfectionism; Shyness

ABSTRACT

Described are the background, rationale, research design, data collection, analysis, and findings of the Classroom Strategy Study, an investigation of 98 elementary school teachers' general strategies for coping with problem students and their ways of dealing with typical problem behaviors associated with each of 12 types of problem students. Working in the public schools of either a small or large city, participating teachers were nominated by their principals as either outstanding or average in dealing with problem students. Problem students were categorized as: (1) failure prone; (2) perfectionist; (3) underachiever/alienated; (4) low achiever; (5) hostile-aggressive; (6) passive-aggressive; (7) defiant; (8) hyperactive; (9) distractible; (10) immature; (11) peer-rejected; and (12) shy/withdrawn. In general, findings of the study indicated that the higher rated teachers expressed more willingness to become personally involved in working with problem students, more confidence in their ability to elicit significant improvement in the problem behavior, and a richer description of long-term prevention or solution strategies. Qualifications and elaborations of the general findings revealed the way general strategies interacted with situational and context factors. Additionally, differences were found between effective practices in early versus later grades and small versus large schools. (RH)

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Research Series No. 187

THE CLASSROOM STRATEGY STUDY: SUMMARY REPORT OF GENERAL FINDINGS

Jere Brophy
Mary Rohrkemper

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Published by

The Institute for Research on Teaching
College of Education
Michigan State University
East Lansing, Michigan 48824-1034

May 1988

This work is sponsored in part by the Institute for Research on Teaching, College of Education, Michigan State University. The Institute for Research on Teaching is funded from a variety of federal, state, and private sources including the United States Department of Education and Michigan State University. The opinions expressed in this publication do not necessarily reflect the position, policy, or endorsement of the funding agencies.

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Abstract

This report describes the background, rationale, research design, data collection and analysis decisions, and some of the findings of the Classroom Strategy Study, a large-scale investigation in which 98 experienced elementary (K-6) teachers nominated by their principals as either outstanding or average at dealing with problem students described their general strategies for coping with 12 types of problem students and told how they would handle incidents depicted in two vignettes portraying typical problem behavior associated with each type. The report describes general trends in the teachers' interview and vignette responses (e.g., the frequencies with which different treatment strategies were mentioned) as well as contrasts in patterns of response to different types of student problem behavior. In addition, it describes contrasts between teachers who differed in role definition (emphasizing instruction vs. emphasizing socialization), school location (Small City vs. Big City), grade level (K-3 vs. 4-6), and gender (male teachers vs. female teachers).

THE CLASSROOM STRATEGY STUDY: SUMMARY REPORT OF GENERAL FINDINGS

Jere Brophy and Mary Rohrkemper[1]

This report summarizes the background, design, procedures, and general findings of the Classroom Strategy Study, a large-scale investigation of elementary school teachers' perceptions of and reported strategies for coping with problem students (students who present chronic problems involving unsatisfactory achievement, personal adjustment, or classroom behavior). Twelve types of problem student were considered: underachiever due to low self-concept/failure syndrome, underachiever due to perfectionism, underachiever due to alienation, low achiever, hostile aggressive, passive aggressive, defiant, hyperactive, distractible, immature, shy/withdrawn, and rejected by peers.

Experienced teachers who had been nominated by their principals as being either outstanding or average in ability to cope with problem students responded to open-ended interviews and vignettes designed to elicit their attitudes and beliefs about each type of problem student and their strategies for coping with the problems that that type of student presents. These responses were transcribed and coded, yielding scores indicating teacher self report of various beliefs, attitudes, expectations, and coping strategies. These scores were then subjected to statistical analyses yielding two general types of

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[1]Jere Brophy is coordinator of the Classroom Strategy Research Project and is a professor of teacher education at Michigan State University. Mary Rohrkemper, a former IRT intern with the project, is assistant professor in the Department of Human Development at Bryn Mawr College. The authors wish to thank Jane Smith, Janis Elmore, Carolyn Rettke, Jean Medick, Lonnie McIntyre, Susan Rubenstein, Stephen Katz, and JoAnn Hite who assisted in project planning and data collection; Jane Smith, Lynn Scott, Patricia Linton, Carolyn Wainright, Linda Ripley, and Sheba Dunlap who coded the data, Suwatana Sookpokakit, Neelam Kher, and Frank Jenkins who assisted with data preparation and analysis; and June Smith who assisted in manuscript preparation.

information: descriptive data indicating the relative frequency of each response as observed in the sample of teachers as a whole and in subsamples differing by grade level and geographic location; and correlational data indicating relationships between interview or vignette responses and ratings of teachers' effectiveness in coping with problem students made by principals (based on general experience with the teacher in the school setting), classroom observers (based on two half-days of observation in the teacher's classroom), and transcript coders (based on the teacher's responses to the interview questions). Taken together, these data describe the strategies reportedly used by regular classroom teachers for coping with problem students in their classes and provide suggestive (correlational) information about the relative effectiveness of these strategies.

Background and Rationale

The Classroom Strategy Study was one of the first projects conducted under the auspices of the Institute for Research on Teaching (IRT), an organization funded from a variety of federal, state, and private sources and administered through the College of Education at Michigan State University. The IRT is similar in many respects to the university-based educational research and development centers established originally in the 1960s by the United States Office of Education and presently funded through the Office of Educational Research and Improvement. The IRT has several distinctive features, however, some of which contributed directly to the initiation and shaping of the Classroom Strategy Study.

One such feature is its emphasis on teacher collaboration. At the time the data for the Classroom Strategy Study were collected, the IRT research staff included not only faculty, graduate students, and various support staff, but also "collaborating teachers." These were experienced teachers (mostly

regular classroom teachers working at the elementary school level) who spent a year or more working half-time in the IRT (teaching in their regular classrooms in the mornings and then coming to the IRT in the afternoons). The collaborating teachers participated in all of IRT's activities and acted as resource persons to its various projects. In addition, they worked intensively on a particular project as part of the regular research staff. (Two collaborating teachers--Jean Medick and Carolyn Rettke--were among the IRT staff that worked on the Classroom Strategy Study.)

The larger group of collaborating teachers not only acted as advisors and resource persons to this study but provided the original impetus for the study itself. This occurred when, in 1976, IRT's then co-directors (Judith Lanier and Lee Shulman) asked the teacher collaborators to identify areas of research knowledge that they felt the most need for or that they believed would be of most use to them as teachers. This produced a variety of responses, but all of the teachers expressed a need for information about how to cope with problem students--those with personal characteristics that make them unusually time-consuming, difficult, or frustrating to teach. The Classroom Strategy Study began as an attempt to address this expressed need.

The design of the study was also shaped by IRT's research mission. IRT research focuses squarely on the process of teaching and the role of the teacher, rather than on "educational research" more broadly conceived. Within this, the focus is on enduring problems of practice; that is, on how teachers can learn about and develop effective solutions to the practical problems that are inherent in the teacher role. In the case of the Classroom Strategy Study, these enduring problems of practice included discovering how to cope with students whose chronic problems require intensive and personalized treatment beyond what is involved in effective organization and management of the class as a whole.

Another prominent feature of the IRT research mission is deliberate attention to teachers' thinking in addition to their behavior. In the present study, this orientation showed itself in the attention devoted to teachers' perceptions, beliefs, attitudes, and expectations concerning problem students in addition to their strategies for coping with such students, and in the attention devoted to the goals and rationales associated with coping strategies in addition to the strategies themselves.

Formation of General Plans

Once the IRT decided to develop a project dealing with teachers' strategies for coping with problem students, staff were assigned and the group (consisting of researchers, teacher educators, collaborating teachers, and graduate assistants) began working to identify the questions to be addressed and to develop methods of addressing them. Early meetings were spent defining terms and debating suggested research questions and methods. Most suggestions were eventually rejected, either because they did not address the group's research mission or because they did not seem sufficiently comprehensive or otherwise adequate to the task at hand. Eventually, it was agreed that the project would be designed to describe and evaluate strategies that regular elementary school teachers (i.e., not school psychologists, counselors, social workers, resource room teachers, or other specialists), working within the constraints normally associated with the teacher role, could use for coping with problem students.

Several data collection approaches were considered. One was yearlong classroom observation in a great many classrooms. This idea was rejected for several reasons. One was its prohibitive cost. Another was that the classroom observation approach seemed neither efficient nor sufficient. Critical incidents involving many types of problem student are relatively infrequent (so that classroom observation would be inefficient), and many occur during private

conversations in the hall, after school, or on the phone with parents. The presence of an observer at these times could seriously alter the behavior of the teacher or the student.

The second approach considered (and piloted) was intensive interviewing of teachers about actual problem students in their classes. This method yielded rich descriptions of unique case studies, but case studies that did not lend themselves to analysis. Each case seemed unique, and it was not possible to group them in order to collate information about how to respond to any particular type of problem student. It became clear that we needed a common stimulus for the teachers, both to focus their attention and to facilitate our data aggregation and analysis.

Thus, the method ultimately adopted involved presenting teachers with descriptions of the key personal characteristics and behaviors of problem student types commonly found in elementary school classrooms, as well as with vignettes depicting incidents of troublesome behavior on the part of such students. The teachers were asked to tell us their general strategies for responding to each type of problem student and to describe their specific strategies for responding to the incidents depicted in the vignettes.

This approach appeared to offer the most potential for working within the constraints and resources at hand and yet at the same time addressing the key research questions in ways likely to produce systematic and replicable scientific data. The data would be limited by the fact that they were self-reported, and thus open to various types of memory failure and distortion, social desirability responding and other reporting biases, and all of the other threats to reliability and validity that are involved in asking people to report on their own behavior (Ericcson & Simon, 1980; Nisbett & Wilson, 1977). In contrast, several features were built into the study to guard against such problems. First, experienced teachers were being asked about aspects of their

work that were familiar to them and that usually had involved some prior conscious thinking and decision making. Second, the teachers were asked open-ended questions and encouraged to speak at length in their own words (rather than being asked to choose among alternatives supplied by the investigators). Self-report data tend to be largely accurate when people are asked about familiar matters that they have thought about and experienced and when they are allowed to respond in their own words (Ericcson & Simon, 1980; Shavelson & Stern, 1981). Third, the teachers were asked first to describe their strategies (what they would say and do) and only second to discuss their rationales (why they would respond in this way). Thus, the interview structure encouraged them to disentangle their responses to students from their rationales and justifications for those responses. This procedure likely enhances the validity of the self-report of strategies (Nisbett & Wilson, 1977). Finally, each teacher was observed for two half-days, and these data on what teachers were observed to do in their classrooms with their actual students were used to assess the validity of the teachers' self reports of responses to hypothetical students.

Details of the design and its rationale are given in the following sections.

The Twelve Types of Problem Student

The teacher collaborators who originally suggested this study had three broad categories of problem student in mind: low self-concept/failure syndrome students who have become so defeated by repeated frustration that they no longer seriously try to master the material; hostile students who disrupt the class, defy the teacher, and get in fights and arguments with their peers; and socially isolated students who are rejected by the peer group. This list was refined and expanded in the early meetings of the research staff. Ultimately,

about 75 types of problem behavior were identified, ranging from general syndromes to highly specific behaviors seen only in certain situations. It seemed obvious that different types of problem student would require different teacher responses (even though certain general traits such as patience and empathy might be important for all types of problem student), so that we needed to interview teachers about how they responded to particular problem student types rather than to "problem students" in general. However, the list of 75 behavior problems contained a great deal of ambiguity and redundancy, and in any case represented too many problem types to address in a single study. Consequently, we decided to pare the list down to about 10 types.

The list was first winnowed through elimination of duplication, and then sharpened and elaborated using concepts and terminology borrowed from previous studies of chronic childhood problem behavior syndromes as seen by clinicians or classroom teachers (Lambert & Nicoll, 1977; Miller, 1972; Peterson, 1961; Stott, Marston, & Neill, 1975; Werry & Quay, 1971). This process resulted in a list of about 20 syndromes or patterns of problem behavior, later reduced to the 12 shown in Table 1 by eliminating several that are less severe or widespread than the others.

The 12 patterns are defined so as to be mutually exclusive, even though several could coexist in the same student. For example, short attention span/distractibility and motoric hyperactivity involve different behaviors but are often seen in the same individuals, and either or both of these could be combined with underachievement, hostile aggressive behavior, or other patterns as well. Even where such multiple patterns exist, however, the patterns are different enough to be described separately without difficulty, and it seemed likely that teachers would use different strategies to try to cope with them. Consequently, data collection procedures were designed to consider each behavior separately, and the data are reported accordingly. It should be kept in

Table 1

The 12 Problem Student Types

1. Failure syndrome. These children are convinced that they cannot do the work. They often avoid starting or give up easily. They expect to fail, even after succeeding.

    a. easily frustrated
    b. gives up easily
    c. says "I can't do it"

2. Perfectionist. These children are unduly anxious about making mistakes. Their self-imposed standards are unrealistically high, so that they are never satisfied with their work (when they should be).

    a. too much of a "perfectionist"
    b. often anxious/fearful/frustrated about quality of work
    c. holds back from class participation unless sure of self

3. Underachiever/alienated. These children do a minimum to just "get by." They do not value school work.

    a. indifferent to school
    b. minimum work output
    c. not challenged by school work; poorly motivated

4. Low achiever. These children have difficulty, even though they may be willing to work. Their problem is low potential or lack of readiness rather than poor motivation.

    a. difficulty following directions
    b. difficulty completing work
    c. poor retention
    d. progresses slowly

5. Hostile-aggressive. These children express hostility through direct, intense behaviors. They are not easily controlled.

    a. intimidates and threatens
    b. hits and pushes
    c. damages property
    d. antagonizes
    e. hostile
    f. easily angered

6. Passive-aggressive. These children express opposition and resistance to the teacher, but indirectly. It often is hard to tell whether they are resisting deliberately or not.

    a. subtly oppositional and stubborn
    b. tries to control
    c. borderline compliance with rules
    d. mars property rather than damages
    e. disrupts surreptitiously
    f. drags feet

Table 1 (cont'd.)

7. Defiant. These children resist authority and carry on a power struggle with the teacher. They want to have their way and not be told what to do.

    a. resists verbally
        (1) "you can't make me"
        (2) "you can't tell me what to do"
        (3) makes derogatory statements about teacher to others

    b. resists nonverbally
        (1) frowns, grimaces, mimics teacher
        (2) arms folded, hands on hips, foot stomping
        (3) looks away when being spoken to
        (4) laughs at inappropriate times
        (5) may be physically violent toward teacher
        (6) deliberately does what teacher says not to do

8. Hyperactive. These children show excessive and almost constant movement, even when sitting. Often their movements appear to be without purpose.

    a. squirms, wiggles, jiggles, scratches
    b. easily excitable
    c. blurts out answers and comments
    d. often out of seat
    e. bothers other children with noises, movements
    f. energetic but poorly directed
    g. excessively touches objects or people

9. Distractible. These children have short attention spans. They seem unable to sustain attention and concentration. Easily distracted by sounds, sights, or speech.

    a. has difficulty adjusting to changes
    b. rarely completes tasks
    c. easily distracted

10. Immature. These children are immature. They have poorly developed emotional stability, self-control, self-care abilities, social skills, and/or responsibility.

    a. often exhibits behavior normal for younger children
    b. may cry easily
    c. loses belongings
    d. frequently appears helpless, incompetent, and/or dependent

11. Peer rejected. These children seek peer interaction but are rejected, ignored, or excluded.

    a. forced to work and play alone
    b. lacks social skills
    c. often picked on or teased

12 Shy/withdrawn. These children avoid personal interaction, are quiet and unobtrusive, and do not respond well to others.

    a. quiet and sober
    b. does not initiate or volunteer
    c. does not call attention to self

mind, however, that teachers deal with real students, not abstract behavioral syndromes. They may worry more about peer rejection of compliant students, for example, than about peer rejection of students whose behavior is marked by defiance and hostile aggression. These and other possible interaction effects among behavior patterns that coexist in the same individuals were not addressed in this study.

In our original conception, the 12 problem types were subdivided into four clusters: problems involving unsatisfactory achievement progress (failure syndrome, perfectionist, underachiever due to alienation, low achiever), hostility and aggression problems (hostile aggressive, passive aggressive, defiant), problems in adjusting to the student role (hyperactive, distractible, immature), and social interaction problems (shy/withdrawn, rejected by peers). The perfectionist type had not been on our original list, but it was added because interviews with teachers about failure syndrome students revealed that the term "failure syndrome" sometimes was taken to refer to perfectionism (the tendency to underachieve due to obsessive overconcern about avoiding errors and producing perfect products) in addition to or instead of the pattern of behavior that we had intended the "failure syndrome" to identify (a tendency toward "learned helplessness," in which repeated failure and frustration has left certain students unwilling to even try to master the material, or if they do try, likely to give up at the first sign of difficulty or frustration). Both syndromes involve underachievement due to emotional problems, but the causes and emotional dynamics are different. In addition, both syndromes differ from that of underachievement due to lack of interest or alienation, in which students simply do not care about academic achievement or have become alienated from academic tasks for reasons other than fear of failure. Finally, all three of these underachievement patterns differ from the pattern shown by willing but limited low achievers who have difficulty meeting objectives because of limited

school readiness or intellectual ability (although many such low achievers eventually became discouraged or alienated, as well).

Low achievers were the only problem student type considered in this study whose problems were explicitly attributed to limitations in school readiness or intellectual abilities rather than to personal traits or behavioral predispositions (although some teachers inferred intellectual limitations when discussing some of the other problem student types). The low achiever group was added to differentiate it explicitly from the various types of underachievers and to sharpen the distinctions between teachers' strategies for dealing with students whose abilities for handling the work are limited and their strategies for dealing with students who have the intellectual ability to achieve but are not doing so satisfactorily because of motivational or emotional problems.

Problems involving hostility and aggression originally were separated into just two types, according to the object of the negative emotion or behavior: the teacher or the peers. However, pilot interviews revealed that teachers distinguished clearly between students who defied them overtly and students who were noncompliant and oppositional in various ways but stopped short of direct defiance. The term "passive aggressive" was borrowed from the psychological literature to refer to the latter type of student.

Three syndromes were identified in the area of adjustment to the student role. Two of these (distractibility and hyperactivity) often occur together and are considered by some writers to be part of the same syndrome. However, they refer to different behaviors and often appear separately, so they were considered separately in the present study. Distractibility refers to difficulty in sustaining attention or concentration on lessons and assignments, and thus describes students' mental responses to visual and auditory input. In contrast, hyperactivity refers to patterns of excessive physical movement. It is quite possible to be distractible without being hyperactive, and vice versa.

Distractible students have difficulty meeting the requirements for sustained concentration that are built into the student role, and hyperactive students have difficulty meeting the requirements for relative physical inactivity and quiet.

The third syndrome in this category--immaturity--indicates difficulties in meeting student role requirements involving working independently, caring for one's person and possessions, and handling the various developmental tasks associated with one's age and grade level. The specific behaviors involved may differ somewhat by grade level, but a common element is that immature students do not "act their age." They may be overly dependent on the teacher for structure or help with things that other students handle on their own, and they may be considered babyish by their peers because of their social behavior.

The category of social interaction problems includes shy/withdrawn students in addition to students who are rejected by the peer group. This is because pilot interviews revealed that teachers distinguished students who sought peer contact but were rejected and isolated (because of negative personal qualities or simply because they were new or different) from students who were not actively rejected but who seldom initiated interactions with peers because they were extremely shy or withdrawn (frequently they were troubled or preoccupied, but not necessarily). The latter students were not well adjusted students who happened to prefer to operate independently most of the time; instead, they were extremely shy or withdrawn students whose social unresponsiveness was a source of concern to the teacher.

The categorization of these 12 problem student types into the four groups described above (problems involving unsatisfactory achievement progress, hostility and aggression, poor adjustment to the student role, or poor social interaction) has face validity for teachers and corresponds well with various factor analytic studies of childhood behavior problem syndromes. Furthermore, it

illustrates the thinking about problem students that guided the design of our study. Many other classification schemes are possible, however. As we will describe, we later found it useful to classify the problem student types (and the vignettes associated with them) on the basis of other considerations, such as whether the student presenting the problem was seen as acting deliberately and under self-control or seen as helpless in the face of forces beyond his or her control.

The Teachers

The Classroom Strategy Study was not an experiment but an attempt to draw on the wisdom accumulated by experienced practitioners (in this case, regular classroom teachers working in the elementary grades). All teachers had at least three years of experience on the job, and most had 10 years or more. All were regular classroom teachers (i.e., not resource room teachers or other educational specialists). Those working in the early grades (K-3) usually worked in self-contained classrooms with students assigned either by age/grade level or by performance on achievement tests. Most of the upper grade (4-6) teachers also taught in self-contained age-graded classrooms, but some taught in team teaching or semi-departmentalized arrangements.

Of the 98 teachers, 54 taught in the public schools of a small city, and 44 taught in public schools located in the inner-city neighborhoods of one of the nation's largest cities. Both cities are in the midwest (they will be referred to in this report as Small City and Big City). Small City was a desirable site in which to conduct the research because its schools were representative in many ways of the schools in the nation at large. Because major employers in the area included the state government, a major university, and several automobile parts and assembly plants, the city had a diversified economy that provided a variety of both white collar and blue collar jobs. In

addition, although the majority (over 60%) of the students in the school system were Anglos, there were significant black (almost 25%) and Hispanic (10%) minorities, as well as small percentages of Asians and Native Americans. Many of these minority students attended naturally integrated schools, although some were bused from areas of concentrated minority residence to schools in predominantly Anglo neighborhoods (this arrangement for desegregation through busing had been in place for several years before the study began).

Thus, the Small City schools included a good cross section of students and in most respects provided a good location in which to conduct this research. However, Small City did not contain a populous and geographically extensive economically depressed area, so that it did not have what are often called "inner-city schools." Yet, the need for information about coping with problem students appeared to be greatest at such schools, suggesting the need to conduct research in them. Also, it was possible that the strategies for coping with problem students that worked most effectively in inner-city schools would not be the same strategies that worked most effectively in other schools.

These and related considerations led us to include the inner-city schools of Big City as a second site for data collection. That is, within the Big City system as a whole, we worked with three districts that served the most economically depressed inner-city areas. The vast majority of students attending these schools were from black families, and most were poor. Readers should bear in mind that, although we will frequently refer to the "Big City" subsample for convenience when reporting results, this sample was confined to inner-city schools and is not representative of the Big City school system as a whole.

In summary, the 98 teachers in the sample include 54 working in Small City and 44 working in the inner-city schools of Big City. The Small City subsample contained 28 teachers in the lower grades (K-3) and 26 in the upper grades

(4-6), of whom 7 were male and 47 were female. The Big City subsample included 22 teachers working in the lower grades and 22 in the upper grades, of whom 10 were male and 34 were female. All 50 of the teachers working in the lower grades were female; 17 of the 48 teachers working in the upper grades were male.

Principals' Ratings

So far, we have noted that the teachers were recruited from among regular classroom teachers with at least three years of experience on the job who were working in grades K-6 in Small City or inner-city Big City. One additional criterion was used in identifying teachers for possible recruitment: the principal's rating of the teacher's relative success in coping with problem students. In addition to describing what a large sample of experienced teachers could tell us about coping with problem students, we wanted to be able to code the teachers for relative effectiveness and look for systematic differences between teachers coded as more effective and teachers coded as less effective. This proved very difficult to accomplish, because there are varying definitions of what constitutes success in coping with problem students and because, even where agreement on defining such effectiveness might be obtained, it is difficult to find anyone who possesses sufficient information to make valid judgments about teachers.

Interviews with teachers and school district personnel steered us toward principals as the best available source of such ratings. Because most teachers work in relative isolation from their peers, they did not feel competent to judge their peers. Resource room teachers and various itinerant educational specialists would have been in a position to rate teachers in some cases, but there was great variation in their frequencies of visiting different schools and interacting with different teachers. These and other potential sources of

information about teachers (including parents and students) were considered but ultimately rejected as even less likely to be able to make well informed and valid judgments than principals or teachers themselves, so we ultimately settled on principals' judgments as our initial criterion for classifying teachers according to their relative effectiveness in dealing with problem students (knowing that these principals' judgments would later be supplemented by teacher self-ratings and ratings made by classroom observers).

Principals nominated teachers for potential involvement in the study by responding to the following two questions:

A. Outstanding Teacher(s)

> Do you have a teacher whom you consider to be truly outstanding in effectively handling difficult students--minimizing their problem behavior and responding to it effectively when it does occur? Please note the name of this teacher below. (Note another if you believe that more than one teacher at your school is truly outstanding in this regard, but bear in mind that we seek to identify the top 10% or so of these teachers.)

B. Other Experienced Teacher(s)

> For each "outstanding" teacher included in the study, we want to include another teacher with at least three years of experience who is not as outstanding in effectiveness in dealing with the 12 types of difficult students that we have identified for focus. We do <u>not</u> seek teachers who are overwhelmed with problems and cannot cope with difficult students. Instead, we seek the 80% or so of teachers who are neither outstandingly effective nor notably ineffective in this regard--teachers who maintain satisfactory classroom control and who usually can cope with the problems that difficult students present, even though they are not as outstanding as the teacher(s) named above. Teachers who teach at the same grade level as the teacher(s) named above are especially desirable.

Note that the questions called for principals to judge teachers on their <u>general</u> effectiveness in dealing with problem students, rather than to rate their effectiveness for each of the 12 types of problem student separately. We would have preferred 12 separate ratings, but pilot interviews revealed that principals were unanimous in stating that they could not make such ratings validly, even though they did have general impressions of teachers' success in handling

problem students. Note also that we asked for outstanding teachers and for typical or average teachers but not for ineffective teachers. This was because we wanted to concentrate on eliciting suggestions about what teachers can or should do with problem students, and not merely descriptions of strategies that are ineffective. Teachers whose classrooms were marked by continuing chaos or conflict were not in position to provide us with this information.

In our communications with principals, we stressed that we intended the label "outstanding" to apply to only the top 10% of teachers, and we allowed the principals to nominate a maximum of only two such teachers from their schools to the "outstanding" category (although they could nominate any number to the "other" category). These steps were necessary because most principals were clearly biased in favor of the teachers in their schools. Many would have nominated more than two of their teachers (and in a few cases, would have nominated all of their teachers) as outstanding if we had allowed them to do so. Only one principal (of about 40 that we contacted) stated that he did not believe that any of his teachers fit our definition of "outstanding." In general, then, the principals we contacted tended to hold their teachers in high regard. This is not necessarily a generalized phenomenon, however, because the principals we contacted were volunteers who agreed to participate in the study after hearing a brief description of its purpose and design. It may be that these principals had better teaching staffs and/or better personal relationships with their teachers than principals who did not volunteer to participate.

We excluded principals who were in their first year of assignment at their present schools and thus had not had much time to gather information about their teachers. We were also prepared to exclude any other principal who stated that he or she did not possess the information needed to respond to our questions, although no experienced principal made this claim. Still, some

principals had much more information than others, not only because of differences in length of contact with their teachers, but also because of differences in frequency and purpose of classroom visits and faculty meetings. A few principals had detailed information about teachers' strategies and relative levels of success with problem students in general and even with particular types (so that, for example, they might assign a shy student to Teacher A but assign a defiant student to Teacher B, based on the belief that Teacher A was particularly good at drawing out shy students and that Teacher B was particularly good at coping with defiance). Most principals, however, had little direct (observational) knowledge of teachers' strategies, and seemed to judge teachers according to general impressions gleaned from personal interactions with them, the frequency and nature of the disciplinary referrals they made to the office, and their general reputations with other teachers and with students and their parents.

Although our instructions asked the principals to consider teachers' general levels of success with all types of problem student, and although success was defined as "minimizing their problem behavior and responding to it effectively when it does occur," it appears that most principals rated teachers primarily on their success in handling disruptive, aggressive, and defiant students (and even here, they appear to have placed more emphasis on the teachers' success in containing and responding to these students' undesirable behavior than on their success in developing more desirable behavior patterns). This is understandable in view of the limited information that most principals had available to them and the priorities that principals must contend with as basic aspects of their role (maintaining safety and discipline in the school is one of their primary concerns and responsibilities). It raises additional problems in using principals' ratings as criterion scores reflecting teachers' effectiveness in handling problem students, however, because there is reason to

believe that different types of problem student require different teacher responses. For example, common sense and some empirical data suggest that hostile and defiant students require clarity in articulating limits and firmness in following through on stated expectations, whereas shy/withdrawn students require acceptance, encouragement, and support. Some teachers may be able to respond equally well to these and other types of problem student, but other teachers might be much more prepared to deal with hostile students than with shy students, or vice versa. For the latter teachers, principals' ratings of "general" effectiveness with problem students would be much more valid for some problem types than for others.

Recruiting Teachers

Each principal nominated one or two "outstanding" teachers and at least that many (usually several more) other teachers. This information was used to identify pairs of teachers for potential inclusion in the project. Ideally, each teacher nominated as outstanding was paired with another teacher working at the same grade level in the same school. Where such exact matching was not possible, the "outstanding" teacher was paired with another teacher working at an adjacent grade level in the same school or with a teacher working at the same grade level in a nearby school serving a very similar student population. Thus, half of the teachers in both the Small City and the Big City subsamples had been designated as outstanding by their principals, and each of these was paired with a comparison group teacher working with the same or a similar grade level and student population.

Because there were more comparison teachers than "outstanding" teachers, the recruiting strategy was first to obtain a commitment to participate from one of the "outstanding" teachers, and then to recruit a suitable paired teacher for the comparison group. The purpose and methodology were described

accurately to the teachers (e.g., open-ended interviewing to gather information that teachers had acquired through experience about working with problem students), although nothing was said about the principals having nominated the teachers into two groups. The teachers were told that we wanted to recruit teachers working in a variety of grade levels and geographical locations who had had at least three years of experience on the job, and that their principals had designated them as teachers who met our requirements and would be good sources of information for us to interview. They were informed that participation would involve the following three elements: (a) two half-day visits to their classrooms (to allow us to observe the teacher in action and see what the students and the daily routine were like); (b) lengthy, open-ended interviewing about general strategies for dealing with 12 types of problem student and about specific responses to problem situations involving these students; and (c) brief checklist, questionnaire, and short answer interview items on the teacher's background and training, the types of students attending the school, the availability and use of various resource persons, and the teacher's perceptions of and experiences with problem students. The teachers would receive a modest honorarium ($50) in partial compensation for their out-of-class time spent responding to interview questions, and they would receive a transcript of their interview in addition to a report of the findings. About 80% of the teachers contacted agreed to participate.

Our original plans called for recruiting 140 teachers, 10 at each grade level (K-6) in each city, with half in the "outstanding" group and half in the paired comparison group. We stopped data collection with the 98 teachers described above, however, for two reasons. First, many teachers (especially in Big City) could not be assigned unambiguously to a single grade level because they taught classes in which two grade levels had been combined or because their students had been assigned by achievement level rather than by age or

number of years of schooling. Second, the data proved voluminous and time-consuming to collect. We began in the 1977-1978 school year, and did not finish until the 1980-1981 school year. These complications led us to modify our consideration of grade-level effects from an attempt to conduct a grade by grade analysis to a simpler comparison of early grades (K-3) versus later grades (4-6).

Data Collection Procedures

Once teachers were recruited, they were assigned to an observer/interviewer (an IRT faculty member, teacher collaborator, or graduate assistant). These observer/interviewers were well acquainted with the purpose and design of the study, including the basis for recruitment of teachers. Thus, they knew that the teachers had been designated as either outstanding or average by their principals. However, they never knew which teachers had been assigned to which group. Procedures were identical for all teachers.

Teachers were first contacted by phone in order to discuss their schedules and identify good times for classroom observation. For our purposes, "good" times for observation were times during which the class was engaged in typical activities. Thus, we avoided testing days, days immediately preceding or following holidays, days devoted to films or field trips rather than to teacher-student interaction in the classroom, and days that were interrupted by pep rallies, school assemblies, or other special events. Two half-day observations were scheduled with each teacher, typically one in the morning and one in the afternoon.

These classroom observations were ancillary to the interviewing that elicited the primary data for the project, but they had several important functions. First, they allowed the project staff member to observe the teacher working in his or her classroom prior to interviewing the teacher. This provided

the observer/interviewer with a concrete and meaningful context within which to interpret the teacher's interview and vignette responses. Teachers often mentioned parts of the room (such as a "time out" area), spoke of daily rituals ("sharing time"), or made other references to life in their classrooms that would not have been clear to the interviewer if observations had not been made prior to the interview. In addition, this shared knowledge of the teacher's activities, along with the social interactions with the teacher that were involved in setting up and conducting classroom observations, fostered the development of a positive social relationship between the interviewer and the teacher that usually helped put both parties more at ease in the interview situation.

The observations also allowed us an opportunity to make our own (independent of the principal's) assessment of each teacher's style and degree of success at working with problem students. Obviously, two half-day observations are not enough to provide detailed information about a teacher's effectiveness in coping with each of the 12 types of problem student under study. However, this amount of observation time did at least provide opportunities for observing the general classroom atmosphere and the tone of teacher-student interaction, students' apparent response to the teacher and engagement in classroom activities, and the teacher's handling of specific incidents of problem behavior. This information could then be used for rating the teachers' styles and levels of success at coping with problem students, and for assessing the degree to which the strategies they reported using in their interviews were actually observed being used in their classrooms.

Observations were arranged to be as unobtrusive as possible. Observers arrived before the students and conferred with the teacher about where to sit so as to be able to watch and listen but without distracting the students. Observers explained that they would simply watch and listen, without interacting with

the teacher or the students during class, although they would want to talk to the teacher after class to ask about things that they had observed but were not sure that they had understood. The teachers were asked to introduce the observers to the students as people who were there to learn about teaching and thus would be watching and taking notes (i.e., not as people there to assist, assess, or otherwise interact with the students themselves). Observers were trained to act in accordance with these guidelines (e.g., to observe as much as possible while minimizing interactions with others and behaviors that would call attention to themselves).

It was made clear to the teachers that all data collection was confidential and that the role of the observer/interviewer was to collect information about the teacher's methods of dealing with problem students. These staff members were not authorized (nor even necessarily qualified) to give the teachers feedback or advice about their teaching, and would not do so. Nor would they give evaluation or information of any kind to the principal or anyone else. Even for project use, data would be identified by code number rather than by the names of the teachers.

During their visits, the observers concentrated on developing a profile of the styles and levels of success with which teachers managed their classes in general and their problem students in particular. Formal data would be provided after the observations were completed, in the form of rating scales and written responses to open-ended questions. Observers were free to make notes relevant to these rating scales and free response questions during their visit, but these notes were brief reminders to be expanded upon later. Most of their time during visits was to be spent attending carefully to events as they unfolded, rather than attempting to record these events as they occurred (such as by using a low inference coding system or continuously writing "thick

description" field notes). Thus, the emphasis was on gathering holistic impressions rather than on recording specific events.

The only exception to this was the requirement that observers prepare "relevant incident reports" describing what transpired whenever the teacher was required to respond to incidents of troublesome behavior (in particular, any that fit one of the 12 behavior patterns associated with the problem student types identified for focus in this study). These were to be verbatim reports describing what was said and done during these relevant incidents. If an incident of defiance occurred, the events leading up to it, the defiant incident itself, the teacher's response (quoting dialogue between the teacher and the defiant student), and the resolution of the incident (insofar as this could be determined) were to be recorded.

These relevant incident reports were later used as the basis for constructing special vignettes (unique to each teacher) designed to elicit teachers' self-reports of how they would respond to hypothetical incidents based on actual incidents previously observed in their classrooms. By comparing their responses to these special vignettes with their behavior as described in the corresponding relevant incident reports, we could assess the degree of congruence between teachers' self-reported behavior and their behavior as actually observed in their classrooms.

Observers' Notes and Ratings

After completing their two half-day observations, but before interviewing the teachers, observers turned in their relevant incident reports as well as sets of notes and ratings. The notes began with free response answers to the following questions:

> 1. Sketch the seating arrangement in the classroom, explaining any unusual seating locations. Are any students segregated from the others or placed behind barriers? Who? Why?

2. Were there impediments to successful management beyond the teacher's control (light, heat, noise, crowding, physical design of the classroom)?

3. Were there any daily routines that led to management problems (bathroom use, drinking fountain, collections)?

4. Were physical locations in the classroom established for use in connection with classroom management (time-out areas, carrels for quiet study or time out, "reward" or "punishment" areas)?

5. Describe any particular situations that the teacher had trouble with (certain lessons or types of activities, certain students, certain types of management problem).

6. Are the students' assignments appropriate (are they engaged in tasks most of the time)? If not, what is the problem: too easy? too hard? not enough? other?

7. Did the teacher have typical responses to student misbehavior? These might include any of the following:

a. Ignores
b. Cites rule
c. Orders student to stop
d. Signals appropriate behavior
e. Expresses feeling about misbehavior
f. Questions student to gain information
g. Isolates, separates
h. Punishes in some way
i. Uses outside help
j. Blames
k. Criticism/sarcasm
l. Other: explain

8. What was the typical result of the teacher's response to student misbehavior? (willing compliance? grudging compliance? a show of compliance followed by renewed misbehavior at the first opportunity? defiance?)

9. Does the teacher state why desirable behavior is appropriate (as opposed to merely giving dos and don'ts without explanation)? Does the teacher explain demands made on students?

10. What rationales did the teacher give (if any) to justify demands made upon the students? (personal appeal; appeal to classroom rules, to school rules, to Golden Rule or other general principles, to students' sense of fairness or self respect; logical analysis indicating that the behavior was counterproductive; affective personalized analysis indicating that the behavior has negative effects on the teacher or other students; concern for safety; other?)

11. Estimate the percent of time that you would characterize the teacher as "teaching" as opposed to "managing" (handling procedural or behavioral problems that prohibit, delay, or interrupt teaching).

12. Estimate the percent of time that you would characterize the teacher as authoritarian, authoritative, or laissez-faire, respectively (following Baumrind, 1971).

13. What is the teacher's expectation concerning student potential? Does this expectation seem to apply to the students in general or is it differentiated across students?

14. Characterize the teacher's general attitude toward the students. Are there any obvious exceptions?

15. Discuss the teacher's classroom behavior in terms of consistency. Is the teacher consistent across situations? Across students? Is there obvious fluctuation or inequity? Invisible students? Explain.

16. Does the teacher view him/herself as being in active control of/responsible for the events that occur in the classroom, or does the teacher seem to passively accept whatever happens?

17. Does the teacher seem to feel at ease in the classroom, secure in his/her role? (This refers to comfort in the teacher role and ease in interacting with students, not to ease in dealing with you as a visitor).

18. Do you think that you significantly disrupted the classroom? If so, how?

19. Add anything else that is important for understanding and evaluating the teacher's style or success in dealing with problem students.

Observers were encouraged to report anything that might seem relevant to the last question (#19). To facilitate such reporting, however, they were provided with the following "cue list":

Tone/manner of speech (politeness, etc.)

Eye contact/maintaining eye level when speaking with individuals.

Touching/physical contact

"Active listening" skills (helps student to identify, clarify, and summarize thoughts and feelings); is concerned and nonjudgmental

"I" statements (expresses own perceptions, feelings, reactions, etc., to students in order to explain demands or rules)

Treatment of wrong answers

Questions: rhetorical vs. genuine; closed, factual vs. open, probing

Distractibility (of teacher, not students)

Use of reinforcement (positive, negative)

Contacts with students: primarily preventive (creating a good learning environment) vs. reactive (maintaining) vs. remedial (restoring)

Stance regarding role as an authority figure

Individual communication with each student vs. role behavior (acting teacher role to student role)

Personal qualities of the teacher (not discipline techniques) important for understanding management style and success

In addition to free response notes on these topics, the observers made high inference ratings (on five-, six-, or seven-point scales) on the following variables:

Monitoring. The consistency with which the teacher monitors events occurring in the classroom

Teacher preparation/organization. Degree of planning and preparation that becomes evident as the day's activities unfold

Classroom atmosphere. Degree to which teacher-student and student-student interactions are marked by happiness, friendliness, and cooperation

Student attention to teacher. Degree to which students watch and listen to the teacher during announcements and lessons

Tolerance for noise and distraction. Degree to which the teacher tolerates student conversation and movement without attempting to control it

Student engagement in assignments. Degree to which students concentrate and work consistently on their assignments during independent work time

Teacher warmth. Degree to which teacher is warm and affectionate in interacting with the students

Individual instruction. Degree to which instruction and assignments are differentiated to meet the needs of individuals

Efficiency of transitions. Degree to which transitions between activities are accomplished smoothly and efficiently

Assignment instructions and feedback. Degree to which teacher makes sure that students understand what they are supposed to do when given an assignment and how they can get help if they need it

Teacher likeability. Degree to which the observer likes the teacher as person and would like to have as a friend

Learning outcomes. Degree to which the teacher is likely to be successful in producing student learning gain in academic knowledge and skills

Affective outcomes. Degree to which the teacher is likely to be successful in fostering desirable affective outcomes (positive self-concepts, positive attitudes toward school and learning, prosocial behavior and cooperative classroom atmosphere)

Finally, as a global rating of the observer's assessment of the teacher's effectiveness at dealing with problem students, the observers were required to rate the teachers on the following scale:

Teacher's group designation. Based on information from the principal, each teacher has been designated as being either outstanding or average at dealing with problem students. Into which group do you think this teacher is nominated?

5. I am confident that this teacher is in the outstanding group.

4. I think that this teacher is probably in the outstanding group.

3. I cannot decide.

2. I think that this teacher is probably in the average group.

1. I am confident that this teacher is in the average group.

Observer/Interviewer Training

Observer/interviewers were trained by the project manager (Rohrkemper). Data collection procedures and instruments were discussed in detail in a project manual, so that training began with reading and discussion of the manual. It then progressed to written assignments designed to ensure that trainees understood and could describe in their own words each of the 12 problem student types, understood the purpose and the corresponding behaviors on which to focus in making each of the various ratings, and received practice in writing relevant incident reports and responding to the open-ended questions. The manual also presented guidelines for when and how to contact teachers, how to

negotiate the nature of visits (where the observer would sit in the classroom, how the observer would be introduced to the class, etc.) and how to respond to requests for information or feedback.

Trainees progressed from reading and writing activities to simulated interviews (in which they were checked and given feedback on their success in following the prescribed procedures for questioning, probing, and keeping the respondent focused on the questions at hand) and classroom visits. The classroom visits were made in tandem with the project manager or a previously trained and experienced staff member. During these visits, the two observers sat somewhat apart and independently took notes and made ratings, which were later compared and discussed. Trainees continued making these practice observations until their relevant incident reports and other free response data were judged to be appropriate in form and content and their ratings showed at least 80% agreement with those of the experienced staff members with whom they were paired for classroom visits. At this point, trainees began working on their own, collecting data independently.

In addition to this initial training, several data quality control procedures took effect once the staff members began collecting data on their own. First, staff members were provided with forms and materials to facilitate data collection and recording and to make sure that questions were asked properly (the questions were to be read verbatim from furnished interview guides). Second, the project manager listened to tapes and reviewed written data as they became available, providing additional feedback to the observer/interviewers. In a few cases, this feedback included information that one or more questions had to be readministered to the teacher, either because the teacher's response was unintelligible from listening to the tape or because the teacher never directly answered the question asked (usually because the question reminded the teacher of a particular student or event and led to a recounting of stories associated

with that student or event, without a return to the original question and an attempt to respond directly to it). Finally, after staff members had done several cases of their own, the project manager accompanied them on classroom visits in order to recheck the reliability of their ratings.

Administration of the Vignettes

Teachers were interviewed at times and places of their convenience. This sometimes meant their homes or a small office or other special room at the school, and it sometimes meant interviewing them in the evenings or during free periods between classes. In most cases, however, the teachers were interviewed in their own classrooms in the afternoons following dismissal of the students. Interviews averaged three to four hours each, spread over at least two and sometimes several sessions. The interviews were audiotaped so that teachers' verbatim responses to the questions were preserved and there was no need for frequent delays while interviewers took notes. During the interviews, the interviewers concentrated on asking the questions properly and seeing that the teachers addressed the questions asked in making their responses. Otherwise, they listened to what the teachers had to say and provided nonverbal and occasional minimal verbal response.

The interviewers were instructed to allow the teachers to respond to each question in their own words and without interruption, so long as the teachers appeared to understand the questions and to be responding to them. If the teachers asked for clarification of questions, or if their responses suggested that they were not addressing the question asked (because they wandered into side issues or irrelevant stories about students or events), the interviewer would repeat or rephrase the question. Once teachers had made their initial free response to the question, interviewers were free to probe in order to clarify ambiguous points or to stimulate the teachers to address any aspect of

the question that had been omitted or to elaborate on matters that the teachers had alluded to but not fully explained. Probing was confined to such clarification and elaboration questions, however; interviewers were instructed not to ask teachers about matters that they did not bring up themselves (except to make sure that they did address the questions we intended to ask, as described above) or in any other way to "put words into the teachers' mouths."

The interviews began with the administration of the vignettes. Each teacher responded to 26 vignettes. The first 24 of these were the regular vignettes, two for each problem student type, administered to each teacher. The last two vignettes were the "special" vignettes, unique to each teacher, developed from the relevant incident reports made during observations in that teacher's classroom and written in the same form as the regular vignettes.

The 24 regular vignettes are shown in Table 2, in the order in which they were presented to the teachers. This standardized order was used (rather than random orders or some other type of standardized order) because it minimized the similarity between vignettes presented close together. Thus, the first vignette presents a student achievement problem (failure syndrome), the second presents a hostility problem (hostile-aggression), the third presents a student role adjustment problem (hyperactivity), the fourth presents a peer relationship problem (rejected by peers), and then the cycle begins to repeat itself as the fifth vignette presents another student achievement problem (perfectionist).

The order used in the first 12 vignettes is repeated in the second 12, so that the failure syndrome vignettes appear as Numbers 1 and 13, the hostile aggression vignettes appear as Numbers 2 and 14, and so on through to the low achiever vignettes that appear as Numbers 12 and 24.

This separation of similar vignettes was designed to ensure that the teachers responded to the specifics depicted in each vignette, rather than giving

Table 2

Vignette Instrument

1. (Failure syndrome student, shared problem)
Joe could be a capable student, but his self-concept is so poor that he actually describes himself as stupid. He makes no serious effort to learn, shrugging off responsibility by saying that "that stuff" is too hard for him. Right now he is dawdling instead of getting started on an assignment that you know he can do. You know that if you approach him he will begin to complain that the assignment is too hard and that he can't do it.

2. (Hostile-aggressive student, teacher-owned problem)
This morning, several student excitedly tell you that on the way to school they saw Tom beating up Sam and taking his lunch money. Tom is the class bully and has done things like this many times.

3. (Hyperactive student, shared problem)
Bill is an extremely active child. He seems to burst with energy, and today he is barely "keeping the lid on." This morning, the class is working on their art projects and Bill has been in and out of his seat frequently. Suddenly, Roger lets out a yell and you look up to see that Bill has knocked Roger's sculpture off his desk. Bill says he didn't mean to do it, he was just returning to his seat.

4. (Student rejected by peers, student-owned problem)
Mark is not well accepted by his classmates. Today he has been trying to get some of the other boys to play a particular game with him. After much pleading the boys decide to play the game, but exclude Mark. Mark argues, saying that he should get to play because it was his idea in the first place, but the boys start without him. Finally, Mark gives up and slinks off, rejected again.

5. (Perfectionist student, student-owned problem)
Beth has average ability for school work, but she is so anxious about the quality of her work, that she seldom finishes an assignment because of all her "start-overs." This morning you have asked the children to make pictures to decorate the room. The time allocated to art has almost run out and Beth is far from finished with her picture. You ask her about it and find out she has "made mistakes" on the other ones and this is her third attempt at a "good picture."

6. (Passive-aggressive student, teacher-owned problem)
The class is about to begin a test. The room is quiet. Just as you are about to begin speaking, Audrey opens her desk. Her notebook slides off the desk, spilling loose papers on the floor. Audrey begins gathering up the papers, slowly and deliberately. All eyes are upon her. Audrey stops, grins, and then slowly resumes gathering papers. Someone laughs. Others start talking.

7. (Distractible student, shared problem)
George's attention wanders easily. Today it has been divided between the discussion and various distractions. You ask him a question, but he is distracted and doesn't hear you.

Table 2 (cont'd.)

8. (Shy/withdrawn student, shared problem)
Linda is bright enough, but she is shy and withdrawn. She doesn't volunteer to participate in class, and when you call on her directly, she often does not respond. When she does, she usually whispers. Today, you are checking the seatwork progress. When you question her, Linda keeps her eyes lowered and says nothing.

9. (Underachieving student, teacher-owned problem)
Carl can do good work, but he seldom does. He will try to get out of work. When you speak to him about this, he makes a show of looking serious and pledging reform, but his behavior doesn't change. Just now, you see a typical scene: Carl is making paper airplanes when he is supposed to be working.

10. (Defiant student, teacher-owned problem)
Roger has been fooling around instead of working on his seatwork for several days now. Finally, you tell him that he has to finish or stay in during recess and work on it then. He says, "I won't stay in!" and spends the rest of the period sulking. As the class begins to line up for recess, he quickly jumps up and heads for the door. You tell him that he has to stay inside and finish his assignment, but he just says "No, I don't!" and continues out the door to recess.

11. (Immature student, shared problem)
Betty seems younger than the other students in your class. She has difficulty getting along with them and is quick to tattle. She has just told you that she heard some of the boys use "bad words" during recess today.

12. (Low achieving student, student-owned problem)
Jeff tries hard but is the lowest achiever in the class. This week you taught an important sequence of lessons. You spent a lot of extra time with Jeff and thought he understood the material. Today you are reviewing. All the other students answer your questions with ease, but when you call on Jeff he is obviously lost.

13. (Failure syndrome student, shared problem)
Mary has the intelligence to succeed, if she applied herself, but she is convinced that she can't handle it. She gets frustrated and disgusted very easily, and then she gives up. Instead of trying to solve the problem another way, or coming to you for help, she skips the problem and moves on. Today she brings you her assignment, claiming to be finished, but you see that she has skipped many items.

14. (Hostile-aggressive student, teacher-owned problem)
Class is disrupted by a scuffle. You look up to see that Ron has left his seat and gone to Phil's desk, where he is punching and shouting at Phil. Phil is not so much fighting back as trying to protect himself. You don't know how this started, but you do know that Phil gets along well with the other students and that Ron often starts fights and arguments without provocation.

Table 2 (cont'd.)

15. (Hyperactive student, shared problem)
Paul can't seem to keep his hands off of the things and people in the room. He also seems to want to inspect or play with whatever is at hand. When he is not physically manipulating someone or something else, he hums, whistles, grimaces, drums his fingers, taps his feet, or makes other noises through physical activity. Just now he has discovered that one of the screws holding the back of his chair to its frame is loose, and he is pushing and pulling at the loose piece. In the process, he is further loosening the connection and at the same time distracting the class with the noise he is making.

16. (Student rejected by peers, student-owned problem)
Kathy is a loner in the classroom and an onlooker on the playground. No one willingly sits with her or plays with her. You divided the class into groups to work on projects, and those in Kathy's group are making unkind remarks about her, loud enough for all to hear.

17. (Perfectionist student, student-owned problem)
Chris is a capable student who is exceptionally anxious about making mistakes. He doesn't contribute to class discussions or recitation unless he is absolutely sure he is right. You recognize his anxiety and try to call on him only when you are reasonably sure he can handle it. When you do this today, he blanches and stumbles through an incorrect answer. He is clearly upset.

18. (Passive-aggressive student, teacher-owned problem)
The class has just been given instructions to line up quickly. The students comply, with the exception of Jack, who is always the last to follow directions. Jack remains at his desk, working on a drawing. He looks up, in the direction of the line, then resumes work on his drawing.

19. (Distractible student, shared problem)
Sarah never seems to finish an assignment. She is easily distracted, and then isn't able to recapture what she had been thinking about before the interruption. You distribute a work sheet to the class, and the students, including Sarah, begin their work. After a couple of minutes you see that Sarah is looking out the window, distracted again.

20. (Shy/withdrawn student, shared problem)
John often seems to be off in his own world, but today he is watching you as you lead a discussion. Pleased to see him attentive, you ask him what he thinks. However, you have repeated his name and he looks startled when he realizes that you have called on him. Meanwhile, you realize that he has been immersed in daydreams and only appeared to be paying attention.

21. (Underachieving student, teacher-owned problem)
Nancy is oriented toward peers and social relationships, not school work. She could be doing top grade work, but instead she does just enough to get by. She is often chatting or writing notes when she is supposed to be paying attention or working. During today's lesson, she has repeatedly turned to students on each side of her to make remarks, and now she has a conversation going with several friends.

Table 2 (cont'd.)

22. (Defiant student, teacher-owned problem)
Squirt guns are not permitted in school. Scott has been squirting other students with his squirt gun. You tell him to bring the squirt gun to you. He refuses, saying that it is his and you have no right to it. You insist, but he remains defiant and starts to become upset. Judging from his past and present behavior, he is not going to surrender the squirt gun voluntarily.

23. (Immature student, student-owned problem)
Greg often loses his belongings, becomes upset, whines, and badgers you to help him. Now he has misplaced his hat, and he is pestering you again. Other students smirk and make remarks about this, and Greg becomes upset.

24. (Low achieving student, student-owned problem)
Tim is a poor student. He has a low potential for school work and also lacks the basic experiences that help a child function in the classroom. You have just presented a new lesson to the class and have assigned related seatwork. You look over the class and see that Tim is upset. When you ask him if something is wrong, he tells you that he can't do it--it's too hard.

responses such as "That's just like the last one--I'd treat it the same way" when in fact they would treat the situations somewhat differently. To avoid this problem and to make the vignette portion of the interview as stimulating and nonredundant to the teachers as possible, we administered the 24 regular vignettes in the order shown in Table 2. The two special vignettes were then tacked on at the end.

The vignettes had been constructed (and revised following several pilot applications) with several features in mind. First, we wanted the vignettes to depict behaviors typical of each of the 12 problem student types under study. Ideally, these behaviors would be described within contexts and in terms very familiar to elementary school teachers, so that the depicted events would seem familiar and realistic to our respondents. Second, we wanted the depicted student behavior to be sufficiently noticeable and troublesome (either because of its inherent nature or because of the timing and context within which it occurred) that most teachers would feel compelled to take some kind of immediate action in response to it. We did not want to depict behaviors that were troublesome but so minor that they could easily be ignored. Third, we wanted to make sure that the problem behavior depicted in the vignette was described as characteristic of the student, and not as an isolated event. In other words, without using the labels directly, we constructed our vignettes to make it clear that the depicted behavior problems involved students who showed the chronic patterns described in Table 1. Fourth, we wanted all of our respondents, regardless of grade level or geographical location, to be easily able to project themselves into the vignettes and imagine the depicted situations as occurring in their own classrooms. Consequently, the behavior problems selected for depiction in the vignettes were restricted to those judged to be likely to occur at any grade level in the K-6 range, and the vignettes themselves contained no reference to student age or grade level. Nor were there references

to geographical location or to other context factors that might not apply to certain teachers (items of equipment or school facilities that are available to some teachers but not others, aides and other adult resources, etc.). Fifth, the students themselves, although identified by gender (through their names) and by the nature of their chronic behavior problem, were not identified by race, social class, or other status characteristics. The names assigned to the students were among those most common to American society and not associated with particular racial or ethnic minorities. Sixth, within the constraints imposed by the above mentioned criteria, we wanted the vignettes to be as short and to the point as we could make them.

In combination, these features of the vignettes were designed to ensure that the teachers would accurately understand the problem in the way that we intended it to be understood (both the specific problem depicted and the fact that this problem was part of a larger chronic pattern) and yet could respond to the problem as if it had occurred in their own classrooms. We were generally successful in this effort, in that teachers found the incidents depicted in the vignettes familiar and realistic, often commenting that they encountered such situations frequently or mentioning students who did exactly what was depicted. There are two partial exceptions to this that should be kept in mind, however. One concerns the perfectionist student and the two associated vignettes (No. 5 and No. 17) dealing with perfectionism. The teachers working in inner-city Big City, especially those in the upper grades, frequently stated that they had never encountered such a student. Consequently, the responses of these teachers concerning perfectionist students involve speculation about what they would do in response to situations they had not actually encountered, rather than self report of what they typically do in familiar situations. The other problem concerns Vignette 6. Here, we neglected to state clearly that Audrey's behavior in delaying the start of the test was part of a chronic

pattern of passive aggressive behavior. Consequently, one can (and many teachers did) interpret Vignette 6 as an isolated incident or as part of a chronic pattern involving something other than passive aggression (such as clumsiness or test anxiety). Thus, responses to Vignette 6 do not always address the specific issue of passive aggressive behavior.

We have noted that nothing was included in the vignettes that might identify the depicted students by grade level, race/ethnicity, or social status, but that the students were given names that in effect identified them as either male or female. This naming (and the consequent gender identification of the students) was not done as part of a systematic attempt to assess how teachers' responses to problem students would differ according to the gender of the problem students (this would have required many more vignettes per teacher). Instead, the problem students depicted in the vignettes were identified by name (and thus by gender) because pilot work had revealed that this was necessary for realism. Teachers found it easy and natural to talk about "Tom" or "Mary," but not about someone known only as "a student."

There were two vignettes for each problem student type (rather than just one) because we wanted to be able to see if teachers' responses to a particular type of problem behavior differed according to the specifics of the situation. Thus, the two vignettes in each pair depicted the same type of problem behavior, but they differed in the specific context in which the behavior appeared and in the particular nature of the behavior itself. There were two vignettes for each problem type because that is the minimum number that would allow us to introduce some situational variance. We would have preferred to have several vignettes for each problem type instead of only two, but we included only two because of financial and time constraints.

Names (and thus, gender designations) were assigned to the vignettes according to the distribution of the problem behavior in the student population.

Thus, both defiant students, both hostile-aggressive students, both hyperactives, and both low achievers are identified as boys, because the vast majority of students diagnosed or labeled as defiant, hostile-aggressive, hyperactive, or low achieving are boys rather than girls. Most of the other problems are more evenly distributed across the two genders, however, so that the vignettes representing these problems include one boy and one girl.

In designing the study, we viewed the vignettes as supplementing the information that we would get from our interviews concerning teachers' general strategies for dealing with each of the 12 types of problem student (these interviews are discussed in the next section). The interviews elicited teachers' general strategies for dealing with each type of student, whereas the vignettes elicited their comments about how they would deal with very specific situations. The general strategies elicited in the interviews were mostly proactive (planned and initiated by the teachers themselves). In contrast, the vignettes presented situations in which the teachers had to react to unplanned (and undesirable) behavior initiated by problem students. In effect (assuming accuracy of teacher self report), administering the vignettes allowed us to gather the kind of data we might have collected if we had been able to observe extensively in the teachers' classrooms.

Because the vignettes were intended to simulate classroom situations in which unexpected and undesirable events occur that require immediate response from the teacher, we required the teachers to respond to the vignettes "cold," without having had a chance to read them, think about them, or make notes beforehand. The teachers knew, of course, that we were intending to ask them about their strategies for coping with problem students, but they had not received copies of the vignettes or descriptions of the particular types of problem student in which we were interested. In presenting the vignettes, we acknowledged that we were asking them to respond without advance preparation,

explaining that we wanted to simulate situations involving problem students that teachers are often faced with in their classrooms (e.g., the teacher must respond immediately to the student's troublesome behavior, without having time to reflect or plan).

The vignettes were printed on separate sheets and presented one at a time. The instructions were as follows:

> This is a series of vignettes depicting classroom events involving problem students. Read each vignette and tell me what you would say and do in the immediate situation if you were the teacher. After telling me what you would say and do, you can elaborate by explaining your goals, the rationale for your goals and behavior, or any other details that you might wish to add.

After reading a vignette, the teacher would be allowed to speak at length until finished, and then the interviewer would (if necessary) ask questions to resolve ambiguities or elicit elaboration on incomplete thoughts. Once the discussion of how the teacher would handle the situation was completed, the teacher was asked to describe the depicted student in his or her own words:

> Using your own words, how would you describe or explain the actions of the student in the vignette? Suppose you were talking to another teacher, for example. How would you describe or explain the student?

The latter question was intended to see if the teacher had understood the problem student's chronic behavior syndrome in the same sense as we had intended to communicate it.

The full instructions were read the first few times, but then the interviewer would switch to briefer reminders such as "Here is the next one. Tell me what you would say and do and then explain," and "How would you describe or explain this student?" As each vignette was completed, the interviewer would remove it and supply the next one, giving the teacher time to read the new vignette but then pressing for an immediate response. If the teacher asked questions about the vignette, the interviewer would respond in ways that were consistent with what was included in the vignette, but without adding anything.

Specifically, the interviewer would affirm that the troublesome behavior in the vignette was typical for the depicted problem student, but would not speculate about the student's motives, intentions, or general school achievement or conduct beyond what was stated in the vignette itself. The vignette interview proceeded in this fashion until all 26 vignettes were completed, taking as much time and spreading over as many sessions as were needed.

Administering the General Strategies Interview

In contrast to the handling of the vignettes, the teachers were given time (and in fact, were encouraged) to prepare for the interview on general strategies for dealing with each of the 12 types of problem student. Upon completion of the vignette interview, the teachers were given descriptions of the 12 problem student types (as in Table 1) and the following instructions:

> Attached is a list of 12 types of problem student that elementary teachers often identify as time consuming, frustrating, and/or worrisome to teach. For the interview, you will be asked to draw upon your knowledge and teaching experience in order to tell how to handle each of these 12 types of problem student.
>
> We are interested in whatever you have to say about each problem student type, so we will schedule as many appointments as we need. For each problem student type, first explain your general philosophy about dealing with this kind of student, indicating why you favor this approach over alternatives that you may be aware of. Then, list the specific strategies you would use. Try to be as richly descriptive as possible, including any step-by-step sequences that might be part of your larger strategy, as well as any back-up strategies you would use if your preferred method did not work. Explain exactly what you mean or give examples when you use terms like "reward" or "punishment."
>
> In addition to describing your strategies, include an explanation of the rationale for each one (the assumptions upon which it is based; the reasons why it should work). Also, evaluate the relative success of the various strategies you recommend. How likely are they to succeed, both in the short run and in the long run? Are certain strategies more successful than others? (We are also interested in strategies that do not work. Please let us know about any of these that you may be aware of, and tell us why they do not work or why your recommended strategies are better). Include any important qualifications about particular strategies (Are some especially successful or unsuccessful with certain kinds of student? Are some feasible only if

certain conditions are present? Are some successful only if used as part of a broader approach?)

The interviewers were instructed to elicit information relevant to each of these questions for each of the 12 problem types (presented in the order shown in Table 1). They were encouraged to question and probe much more actively than during the vignette interviews, but again without interrupting the teacher's train of thought, shifting the course of the interview away from where it was headed (unless it was headed into irrelevant material), or "putting words into the teacher's mouth." In particular, the interviewers were instructed to probe for the rationales underlying recommended strategies in addition to clear explanations of the strategies themselves, as well as for any qualifications on when or with whom the strategies should be more or less effective. They were also instructed to clarify which strategies were considered preferred strategies recommended as basic responses to the problem, and which were recommended only as back-up strategies to be used if the preferred strategies did not succeed. Finally, they asked specifically about strategies that the teacher did not think would be successful (if the teacher did not volunteer this information).

If the teacher mentioned some special program (token reward system, Magic Circle meetings, etc.), the interviewer would ask for a detailed explanation of exactly how the program worked. Details would also be requested when the teacher mentioned involvement of aides or other adult resources in the classroom, talked about strategies that would be phased in and out (When and how?), referred to an unfamiliar concept or procedure, and so forth. In general, the idea was to elicit everything that the teacher had to say about dealing with that type of problem student and to be sure that the teacher's comments were clear and complete enough for us to understand and code accurately.

Scheduling was arranged so that the teachers had at least a week to prepare for these interviews, and they were encouraged to do so by taking time to think and make notes about their strategies for coping with each student type. They were reminded, however, that the whole purpose of the study was to collect information from experienced teachers about what they had learned through their practical experiences with problem students. We told the teachers that we were already familiar with what the experts had to say and that we found much of their advice inapplicable for regular classroom teachers (although it might be appropriate for therapists, counselors, school psychologists, or others who could establish a therapist-client relationship with students seen regularly on an individual basis). We also cautioned the teachers that we wanted their personal knowledge and experience rather than the consensus of the teachers at their school (so they were being asked to think and take notes individually without discussing the matter with colleagues or resource persons). As far as we can tell, the vast majority (perhaps all) of the teachers accepted and followed these guidelines. Although the responses reveal occasional references to books or inservice programs and although sometimes there were frequent similarities in the responses of teachers working at the same school (typically when these teachers mentioned that they were close friends and colleagues who had been sharing experiences and information for years), the teachers' transcripts all have a natural "feel" suggesting that the teacher is giving his or her actual opinions based on experience. A few teachers (the least impressive ones) sound as if they have not been very reflective and have not developed organized or well articulated beliefs about dealing with problem students, so that their responses appear sketchy, unprepared, and often not very credible. In no case, however, did a teacher give us a response that appeared to have been taken directly from a book or some other external source. Thus, we believe that we

did in fact obtain the experience-based responses that our procedures were designed to obtain.

In contrast to the vignette interview, where similar problem behaviors were separated as far as possible in the order of presentation, the general strategy interview began with the four achievement problems and then moved on to the three hostility problems, the three student role problems, and the two social interaction problems. This was because the teachers now had access to full descriptions of the 12 types of problem behavior, with attention directed to the important nuances of difference between similar types, and with time to think about the similarities and differences in how they would respond to these different types. Under these circumstances, it seemed most facilitative to deal with the similar types consecutively, both to sensitize the teachers to the nuances of difference between types in a given set and to make it easier for the teachers to note similarities and draw contrasts between, for example, their responses to failure syndrome students and their responses to perfectionist students.

As with the vignette interviews, the general strategy interviews continued for as long as necessary and were spread over as many sessions as needed. The general strategy interviews completed the teachers' involvement in our study, except for supplying the information described below.

Other Data Collected from the Teacher

The teachers were asked to fill out three brief forms and respond to some focused interview questions about their backgrounds and training, the schools they worked in, and the resources available to them. One form requested the teachers to provide brief descriptions of the 12 types of problem student, using just a single word or a short phrase of their own choosing. Here again, we

wanted to be sure that the teachers understood the 12 types of problem behavior in the ways that we had intended to define them.

A second form asked the teachers to rate (on a seven-point scale from "very poor" to "outstanding") their levels of success in handling each of the 12 types of problem student (separately). These self-ratings of ability to cope with problem students were intended to supplement the information from ratings made by the principal, the observers, and the coders who read the transcripts of the teachers' interviews. The instructions for the self-rating form read: "We are interested in your assessment of your own level of success with each of the 12 types of problem children described on the accompanying pages. Use the scale below to rate yourself on ability to succeed with each type (separately) by circling the scale numbers that apply." Note that "success" was not defined here; we left it up to each individual teacher to do so when making these self-ratings.

The third form dealt with the teacher's experience with each of the 12 types of problem student. The instructions read: "We are interested in the frequency with which teachers encounter each of the 12 behavior problem types we are studying. On the scale below, circle the number indicating how many students like this have been in your classes over the last three years (combined)." Again, the teachers responded using a seven-point scale in which they characterized the numbers of each problem student type that had appeared in their classes in the last three years as "none," "only one," "two," "three," "four to six," "seven to ten," or "more than ten."

Finally, the teachers responded to focused interview questions dealing with their educational background (undergraduate and graduate); inservice training workshops and experiences (especially those related to managing classrooms and handling problem students); professional books they had read; years of experience (by type of school and grade level); the size of the school in which

they were teaching and the racial/ethnic and socioeconomic status breakdowns for its students; the number of students in the class; the incidence of violence and vandalism at the school in the last three years; the basis on which students were assigned to classes at the school (e.g., whether they were grouped by ability or on some other basis); the nature of the seating arrangement used in the classroom; the availability and roles of teacher aides, parent volunteers, student tutors, and other human resources assisting the teacher in the classroom; the extent and nature of pull-out programs or other mechanisms that freed the teacher from responsibility for certain students on a regular basis; the time available to the teacher for planning and preparation; and other information describing the settings within which the teachers worked and the resources and constraints that affected their ability to respond to problem students.

The last question that we asked (held until the end so that answering it would not bias any of the rest of their data) called for the teachers to characterize themselves as placing relatively more emphasis on academic instruction or on student socialization in defining their roles as teachers. Differences between teachers who described themselves as "instructors" and those who described themselves as "socializers" are discussed later in this report.

Data Preparation and Coding

Except for rating scale scores and factual information items, the raw data from the project consisted of transcripts of teachers' responses to the vignettes and the general strategy interviews, as well as the observers' free response descriptions and ratings of teacher and student behavior in the classroom. These raw data transcripts were coded for a variety of information using a variety of coding systems, although certain general procedures for preparing and coding the data were followed uniformly.

First, the teachers' responses and the observers' notes were transcribed, and corrected typescripts were prepared for use in subsequent coding of the data. The observer/interviewers reviewed the first drafts of these typescripts, filling in places where words were missing because of illegible writing or poor signal-to-noise ratio in particular places on the tapes and correcting words or phrases the typist had misinterpreted. Real names of school personnel were replaced with terms such as "the teacher," "another teacher," "the principal," or "the counselor." Real names of students were replaced using standardized names appropriate to the gender of the student being described. The name of the school and any other personal names that crept into the transcripts were also eliminated or replaced with fictional substitutes. Also eliminated from the transcript were segments of personal conversation between the teacher and the interviewer that had nothing to do with the formal data collection, as well as false starts, hemming and hawing, ungrammatical constructions that were immediately corrected by the teacher, and other material that would merely clutter the transcripts without adding anything of substantive interest to the study.

Transcripts were typed so that responses to each vignette or interview question could be separated from the rest of the data for that teacher, although each page would include the teacher's code number. Code numbers were assigned in two series, one for Small City and one for Big City. Within each series, teachers were assigned code numbers roughly in the order in which they were recruited. The code numbers do not bear any systematic relationship to any other factor, however. Thus, coders working with a particular transcript would know whether the teacher was from Small City or from Big City and whether the teacher was recruited early, middle, or late in the data collection phase of the study, but would not know the teacher's gender (unless this was made

obvious in some of the teacher's comments), school, or grade level, and would not know how the teacher had been rated by the principal or the observer.

The standard procedure for developing and applying coding systems was as follows. Brophy and/or Rohrkemper, sometimes assisted by other staff members, would develop an initial version of a coding system using a sample of 20 transcripts, then try out the system on those transcripts and revise it. At this point, Brophy and Rohrkemper (or one of these individuals and one other staff member) would try out the revised system on the same 20 transcripts, to see if at least 80% agreement could be reached on each decision involved in coding with that system (agreement percentages rather than correlation coefficients were used for assessing intercoder reliability, both because they are more exact and because most of the coding involved presence/absence determinations which are best conceived of as agreement/disagreement decisions, rather than ratings or other quantity estimations that may be assessed more appropriately with correlational methods).

At this point, coding categories that yielded acceptable agreement were retained for inclusion in a revised version of the system (although sometimes with minor changes designed to eliminate ambiguities that the trial coding had uncovered). Coding categories that failed to yield 80% or better agreement at this point were either dropped (if it appeared that they involved distinctions that were inherently too ambiguous or otherwise difficult to make reliably) or revised (if the agreement data and the ensuing discussion suggested that clarification or revision of the coding instructions would eliminate the ambiguities responsible for the low agreement in the trial coding).

This second revision of the coding system was then reviewed with two staff members who had not been involved in its previous development. These two staff members then independently coded the same 20 cases, and their agreement with each other and with the coding agreed upon by the developers of the system was

assessed. If this coding yielded acceptable reliability (usually it did), the coding system would be considered ready for use with the rest of the transcripts (although a few minor clarifications were usually incorporated into the system, involving retyping in final form before actual use). The two staff members who had tried out the system then would code the remaining transcripts, again working independently. When this coding was completed, the scores would be compared. Codes that had been agreed upon would be used, and codes that represented disagreements would be discussed and resolved. Usually, resolution was achieved with relative ease in discussions between two coders, although occasionally something came out which had to be brought to Brophy or Rohrkemper for resolution. (Most of these were situations in which the teacher's response was not relevant to the question asked or in some other way failed to yield information within the domains anticipated. Thus, the final disposition of the coding usually involved classifying such responses as "not codable" or "other," rather than trying to force them into categories that they did not really fit.)

Occasionally, coding reliability problems would persist even after two tryouts and revisions of a coding system. If so, further attempts to make certain distinctions usually were dropped. If the distinctions were considered important enough to persist in trying to code, the guidelines would be revised once again and tried out on another sample of 20 cases in addition to the 20 used for developing the system in the first place. This was very rare, however.

In summary, the data for each set of codings were developed by having two coders independently apply a previously refined coding system to all of the transcripts, and then compare their codes and resolve disagreements through discussion. These coders could tell from the teachers' identification numbers whether they came from Small City or Big City, but they would not know how the teachers had been rated by the principal or the observer.

Teacher Effectiveness Ratings

In part, the Classroom Strategy Study can be seen as a survey study designed to describe elementary teachers' beliefs about and strategies for coping with problem students. In addition to merely describing these beliefs and strategies, however, we wanted to be able to make statements about their relative appropriateness or effectiveness. Ultimately, of course, this can be accomplished only through carefully controlled experimentation. As an intermediate step, however, correlational data can be developed linking scores representing teachers' beliefs or strategies with scores representing teachers' effectiveness in coping with problem students. Toward this end, several such "effectiveness" measures were included in the present study.

The term "effectiveness" was placed within quotation marks in the previous sentence to call attention to the fact that the effectiveness measures used in this study were high-inference ratings of unknown validity, rather than well validated and widely accepted objective measures. We lacked the resources to observe teachers intensively over long periods of time, so it was not possible for us to develop detailed information banks describing the problems (if any) that each teacher's students presented, how the teacher responded to those problems, and how the students responded to this treatment. Furthermore, even if such data had been available, assignment of effectiveness scores to teachers would have been problematic because of a lack of professional consensus about success criteria (in particular, on the issue of how much emphasis should be placed on symptom remission, and other purely behavioral criteria, and how much on judgments of improvements in reality contact, control of affect, level of insight, self esteem, and other qualitative aspects of subjective experience). Scaling relative success with different problem student types would also present difficulties. (Is doubling shy students' rates of initiation of social

behavior equivalent to halving hostile aggressive students' rates of initiating fights and arguments?)

In any case, we did not have the luxury of concerning ourselves with such issues, because we did not have detailed objective information on teachers' levels of success in dealing with problem students (let alone differentiated information on their levels of success with each of the 12 problem student types). Consequently, we relied on four different sets of general ratings of teachers' effectiveness in coping with problem students. Each set of ratings was made by different individuals based on different information. The first two of these ratings have already been described: the principals' classifications of teachers into either the "outstanding" or the "average" category, and the observers' ratings of the teachers on a five-point scale ranging from "I am confident that this teacher is in the outstanding group" to "I am confident that this teacher is in the average group."

Coder Ratings

The third set of ratings was made by the coders, based on their readings of the transcripts of the teachers' responses to the interviews concerning general strategies for coping with each of the 12 problem student types. Among other things, each teacher's response to each problem student type was coded on the following scale:

Probable effectiveness of teacher's strategies. Considering the response as a whole, how effective do you think this teacher is in coping with this type of problem student? Code what you believe would be the ultimate outcome of the teacher's efforts across the school year.

1. **Worsen the problem.** The teacher's responses to the problem seem counterproductive to the point that, if anything, the problem would be likely to get worse as a result.

2. **No important effects**. The teacher's efforts would not be relevant, intense, or consistent enough to have much effect on the student.

3. **Minor improvement**. The teacher's activities probably would induce some meaningful improvement, but not to the degree implied by No. 4 below.

4. **Long term, general improvement**. The teacher's activities probably would eliminate the problem or at least produce notable improvement that showed some stability over time and generality across situations.

As with all other coding of the interviews, these ratings were made independently by two coders (who then resolved any discrepancies), without knowledge of who the teachers were or how they had been rated by the principals or observers and without knowledge of how the teachers had responded to the interview questions concerning the other 11 problem student types. Thus, the coder ratings of teachers' probable effectiveness with hyperactive students, for example, were made solely on the basis of the transcripts of what the teachers had to say about handling hyperactive students. Furthermore, several different pairs of coders worked on the sets of transcripts, so that the pair of coders whose agreed-upon score was used as the rating of probable teacher effectiveness with hyperactive students was not necessarily (and in fact probably was not) the same pair of coders whose consensus scores were used for rating effectiveness with distractible students, low achievers, and so on.

Despite this independence built into the ratings process, all coefficients of intercorrelation among the 12 sets of coder ratings were positive (although low to moderate, ranging from .01 to .47). Thus, there was a basis for summing the coder ratings across the 12 problem student types to create a score equivalent to a weighted mean or "batting average" reflecting the teachers' general effectiveness in dealing with problem students, as seen by the coders. This sum of 12 coder ratings was used as

one of the criterion scores against which to correlate measures of teacher belief and strategy concerning problem students.

Factor analysis (principal components) of the coder ratings for the 12 problem student types yielded four factors with eigenvalues greater than 1.0, but with generally moderate rather than high loadings and without a clearly differentiated factor structure. Consequently, we did not create factor scores to use in addition to the summary score for the coder ratings. We did, however, use the coder ratings for each particular problem student type (in addition to the sum across all 12 types) as criterion ratings in analyzing the data for that particular problem type. Thus, the data for responses to low achieving students were correlated both with the sum of 12 coder ratings and with the coder ratings for interview responses concerning the low achievers, the data on defiant students were correlated with both the sum of 12 coder ratings and the coder ratings for interview responses concerning defiant students, and so on.

Teacher Self-Ratings

The teachers had been asked to rate (on separate seven-point scales) their relative levels of success (compared to teachers in general) in dealing with each of the 12 types of problem student. It was hoped that these teacher self-ratings would show large variance both within and across teachers, so that each of the 12 sets of ratings could be used separately. However, the data revealed a strong consistency bias in these ratings. Teachers tended to use only the upper half of the scale (which can be seen as appropriate, given their principals' perceptions of them) and did not differentiate much among the 12 problem student types. On a seven-point scale on which 4 = average, 5 = above average, 6 = good, and 7 = outstanding, the means ranged only from 4.9 (for underachievers) through 5.5 (for failure syndrome students), with standard

deviations ranging only from 1.0 to 1.2. Furthermore, factor analysis of these 12 sets of teacher self-ratings revealed that all 12 loaded heavily on a powerful first factor that controlled 88% of the variance and was the only factor with an eigenvalue larger than 1.0. Consequently, further analyses used only this factor score, instead of the 12 separate sets of scores. The factor score represents teachers' general self concepts of ability (or levels of confidence in their ability) to deal with problem students.

Interrelationships Among the Effectiveness Ratings

Given that these four sets of high-inference ratings were made by different individuals using different evidence, we expected positive but only moderate (perhaps .30 to .50) intercorrelations among them, although we hoped that the correlations would turn out to be high enough to allow us to use factor scores representing consensus across two or more of the four sets of raters. Instead, as Table 3 shows, there was no such consensus. The correlations were all positive but low, usually not even reaching the .05 level of statistical significance.

These data indicate that the criterion problems (finding ways to classify or score the teachers for effectiveness in dealing with problem students, either in general or for specific types) were even more serious than we had anticipated. If the four sets of ratings did not load on a common factor indicating some degree of consensus about teacher effectiveness in coping with problem students, what, if anything, was each set of ratings reliably measuring? To address this question, we correlated the four sets of ratings with other information that we had about teacher and school characteristics and with scores based on data gathered by the observers during their classroom visits.

Table 3

Intercorrelations Among the Four Sets of Teacher Effectiveness Ratings

	Observers' Ratings	Coders' Rating (Sum of 12)	Teachers' Self-Rating Factor Score
Principals' Rating	.11	.18*	.33**
Observers' Rating		.16	.07
Coders' Rating (Sum of 12)			.08

*-$p < .05$ ** - $p < .001$

Table 4

Correlations Between the Four Sets of Teacher Effectiveness Ratings and Grade Level, Geographical Location, and Factor Scores From the Observers' Ratings of Classroom Behavior

	Principals' Rating	Observers' Rating	Coders' Rating (Sum of 12)	Teachers' Self-Rating Factor Score
Grade level (1-lower grades, 2-upper grades)	-.04	-.02	-.24**	.04
Location (1-Small City, 2-Big City)	.00	.05	-.38***	.08
Classroom Factor 1 (teacher organization and instructional management; student task engagement)	.19*	.63***	.13	.14
Classroom Factor 2 (teacher warmth, classroom affective atmosphere)	.12	.65***	.06	.01
Classroom Factor 3 (individualized instruction, tolerance for noise and distraction)	-.07	.11	.21*	-.06

* $p < .05$ **$p < .01$ ***$p < .001$

The Meanings of the Teacher Effectiveness Ratings as Inferred from Their Correlations With Other Items of Information About Teachers

Correlations with grade level and geographical location. We began by looking for relationships with grade level and geographical location. As the first two rows in Table 4 illustrate, these variables showed no relationship to principals' ratings, observers' ratings, or teachers' self ratings, but the coders' ratings tended to favor teachers in the lower grades and in Small City over teachers in the upper grades and in Big City. This was because the Small City teachers, especially those in the lower grades, were more likely to mention strategies designed to achieve long-term, fundamental solutions to the student's problem through socialization, instruction, or some form of assistance. As will become clearer below, the coders' ratings were influenced primarily by the degree to which the interview transcripts mentioned reliance on problem-solving techniques commonly recommended by humanistically oriented psychotherapists.

Correlations with observer ratings factors. The last three rows in Table 4 show correlations involving factor scores based on the observers' classroom behavior ratings. Factor analysis of these ratings produced a clear factor structure in which each of the 15 ratings appeared on one and only one of the three factors, and the factors themselves were readily interpretable.

The first factor included the following ratings: teacher's monitoring of events occurring in the classroom, teacher's preparation and organization of lessons, student attention to lessons, student engagement in assignments, efficiency of transitions, quality of assignment instructions and feedback, and observer's prediction concerning learning outcomes (student achievement). It is clear that this factor represents teachers' organization and instructional management skills, combined with student attention and task engagement. The second factor included the following ratings: classroom atmosphere, teacher

warmth (rated separately for typical level and for the high and low extremes observed), teacher likability, and the observer's predictions concerning affective outcomes (student self-concept and personal adjustment; group dynamics and cooperation). Thus, this factor represents teacher warmth and the affective atmosphere of the classroom. Finally, the third factor includes the ratings for the teacher's use of individualized instruction and the teacher's tolerance for noise and distraction. Classrooms scoring high on this factor typically had many different activities going on in different parts of the room simultaneously (typically because the teacher used individualized methods), whereas classrooms scoring low on the factor typically had only one organized activity going on at a time (because the teacher was either teaching the entire class as a single group or teaching a smaller group while the remaining students worked individually on seatwork assignments).

The data in Table 4 show that the observers' ratings are strongly correlated with the first two of these factors, whereas all of the other correlations are much lower. These data are typical of other findings from the study in two respects. First, scores derived from observation data tend to correlate much more consistently and strongly with the observers' ratings than with the principals', coders', or teachers' ratings. This is to be expected, because both sets of data came from the same source (the observers). In fact, the observers' ratings were explicitly made on the basis of what they had observed during their classroom visits.

Second, the correlations of the three classroom factors with the four sets of ratings show the first glimmerings of a pattern that reappears in several other data sets. Ignoring a few complications, we can summarize this pattern as follows: Principals' ratings tend to correlate with measures of the teachers' effectiveness as classroom managers and disciplinarians, observers' ratings tend to correlate with measures of the degree to which the teacher appears

to be a warm, caring, student-oriented person; coders' ratings tend to correlate with measures of the cognitive complexity of the teacher's response, the verbal articulation with which it was expressed, and the degree to which it emphasized techniques recommended by experts (especially modern, humanistic experts); and teachers' self ratings usually show fewer correlations and fail to form interpretable patterns.

Correlations with typical teacher interventions and student responses. Another set of data on teacher and student behavior was developed from the observers' notes about techniques that the teachers typically relied on when attempting to change undesirable student behavior and about typical student response to these teacher interventions. Each class was coded 1 (present) or 0 (absent) for each of 21 teacher intervention strategies and six student responses. The labels for these teacher interventions and student responses are shown in Table 5, along with correlations between them.

In general, these correlations support the findings of previous research on effective classroom management (summarized by Brophy, 1983). The teachers who appeared to get the most effective results (e.g., willing or at least grudging compliance rather than no change, compliance out of fear, compliance followed by new misbehavior, or defiance) were those who used minimally intrusive yet prescriptive techniques such as gaining the attention of misbehaving students by touching or moving close to them or establishing eye contact with them, and then cueing appropriate behavior through direct statements or indirectly through citing a relevant classroom rule, asking a genuine or rhetorical question, making a humorous remark, or praising the appropriate behavior of peers.

In contrast, teachers who were nonintrusive but less prescriptive (because they waited for a chance to establish eye contact or to praise more appropriate behavior rather than intervening immediately, or because they merely expressed displeasure with the misbehavior without cueing appropriate behavior) often

Table 5

Correlations Between Observers' Reports of Teacher Use of Various Intervention Strategies and Observers' Reports of Typical Student Response to Teacher Interventions

	Student Responses					
Teacher Interventions	No Change	Willing Compliance	Grudging Compliance	Compliance followed by new misbehavior	Defiance	Compliance out of fear
Ignore	09	-02	-12	16	09	-09
Cite rule	06	13	22*	-03	-18*	02
Order to stop	13	-23**	16	32***	16	18*
Cue appropriate behavior	-06	36***	-19*	-13	-22*	-03
Express feelings re misbehavior	32***	16	03	-03	-11	00
Question	13	22*	-01	-03	-18*	02
Isolate	13	00	10	10	10	16
Punish/threaten/yell	14	-08	24**	-03	06	18*
Involve resource person	-13	-03	12	06	-11	11
Blame	-02	-17*	21*	-14	01	33***
Criticism/scolding/ sarcasm	09	-11	18*	02	06	36***
Eye contact/staring	22*	26**	-03	02	-03	-06
Look for chance to praise	19*	27**	-06	19*	-14	-15
Praise peers	11	31***	-06	06	-18*	05
Involve parents	08	19*	36***	-10	00	09
Moralize	11	09	04	-18*	02	01
Touch/physical presence	05	28**	03	01	-17*	-10
Humor	13	34***	-11	-04	-08	07
Problem-solving strategies	06	14	08	06	-12	-13
Rhetorical questions	17*	18*	07	00	-06	02
State reality/show awareness	03	19*	04	-20*	-13	14

* $p < .05$ ** $p < .01$ *** $p < .001$

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appeared to be ineffectual (e.g., failed to change the misbehavior). The contrast between patterns of correlates here reinforces a point made by Kounin (1970) in his discussion of teacher withitness: effective classroom managers not only monitor what is going on and remain aware of events occurring all around the classroom, but also let the students know that they are aware and intervene quickly to cue appropriate behavior whenever minor misbehavior threatens to escalate into disruption.

Finally, and also unsurprisingly, teachers who relied on loud and disruptive intervention techniques were reported to be less successful in achieving student compliance. In addition, those who were not merely intrusive but blaming, threatening, or punitive tended to have students who showed undesirable responses (fear, resistance, grudging attitude) even when they did comply.

Correlations between these teacher and student behavior measures and the four teacher effectiveness ratings are shown in Table 6. There are frequent and patterned relationships for the observers' and the coders' ratings, but only weaker and scattered relationships for the principals' and the teachers' self ratings.

The principals' ratings correlated significantly only with the student behavior of compliance out of fear and with the teacher techniques of regaining attention through touch or physical presence, cueing appropriate behavior through questioning, and threatening to involve the principal or some other resource person at the school. There was also a significant negative correlation with punishing, threatening, or yelling at the student. These data suggest that the teachers rated highly by the principals tended to remain coolly professional in retaining continuous control over both their classrooms and their emotions. (Note: The positive correlation for involving or threatening to involve the principal was a surprise to us. We had expected that teachers who tried to avoid involving their principals in disciplinary problems would tend

Table 6

Correlations Between Classroom Observation Measures and Grade Level, Location, and Teacher Ratings Made by Principals, Observers, Coders, and Teachers Themselves[a]

Teachers' Intervention Strategies	N	Upper Grades	Location in Big City	Principal Ratings	Observer Ratings	Coder Ratings	Teachers' Self-Ratings
Ignore the misbehavior	47						17
Cite rules, expectations	42	-22				24	
Order student to stop	61				-36		
Signal appropriate behavior	49		-17		25	26	
"I" statements (express feelings about misbehavior)	44						
Question student to gain information	42			19		22	
Isolate student from peers	42	-18				23	
Punish, threaten, or shout	40	25		-19	-23	-17	
Involve authority figure/resource people (or threaten to)	11			22			
Blame the student (loudly, angrily)	11		-19		-25		
Verbally scold, humiliate, intimidate, or use sarcasm	28	23			-21		
Quietly stare, use eye contact	30		18				
Look for next opportunity to praise good behavior	19						20
Praise peers who are behaving appropriately	26		18			20	

Table 6 (cont'd.)

Teachers' Intervention Strategies	N	Upper Grades	Location in Big City	Principal Ratings	Observer Ratings	Coder Ratings	Teachers' Self-Ratings
Involve parents (or threaten to)	13		23				
Moralize	10		-17				
Control through touch, physical presence	24			26			24
Humor	24	19	18				
Problem-solving questions or techniques	14		32				
Rhetorical questions to control	20						
Indicate (to student) awareness of what student has been doing	17		22				
Students' Responses to Teachers' Interventions							
No change in behavior	10				-24		
Willing compliance	68				46		19
Grudging compliance	16				-34	-17	
Compliance followed by renewed misbehavior	47				-26		
Defiance	8		-20				
Compliance out of fear	9			17	-20	25	
Teachers' Rationales for Desirable Behavior							
No rationales (behavioral demands are made in an authoritarian or moralistic manner)	56	22			-21	-26	

Table 6 (cont'd.)

Teachers' Rationales for Desirable Behavior (cont'd.)	N	Location in Big City: Upper Grades	Principal Ratings	Observer Ratings	Coder Ratings	Teachers' Self-Ratings
States rules or expectations	43	-36	21		30	
Personal appeal/"I" statements	29					17
Appeal to self-concept, self-respect, sense of fairness or responsibility	38			19		
Appeal to self interest (show that misbehavior brings on consequences counterproductive to student self-interest)	42	20		27		
Appeal to empathy, Golden Rule morality	46	18				
Appeal to safety concerns	23				20	
Miscellaneous Observer Ratings						
No students are segregated from the rest of the class through isolated seat assignments	64	-41		19		
No obvious impediments to good classroom management were observed (outside noise, not enough space, poorly designed space, etc.)	74			18		-26
Percent of time spent managing rather than instructing	28			-44		
Percent authoritarian classroom management	31	20	-21	-29		
Percent authoritative classroom management	50		27	51		

Table 6 (cont'd.)

Miscellaneous Observer Ratings (cont'd.)	N	Upper Grades	Location in Big City	Principal Ratings	Observer Ratings	Coder Ratings	Teachers' Self-Ratings
Percent laissez-faire classroom management	18				-29		
Interviewer did not disturb the classroom	68				33		

[a]Decimal points are omitted from the correlation coefficients and only those coefficients that reached the .05 level of significance are shown.

to be rated higher by the principals than teachers who called on the principals with some frequency, but this was not the case.)

The observers' ratings correlated positively with success in obtaining willing compliance from the students and negatively with the less desirable student behavior alternatives. The observers' ratings also correlated positively with the teacher strategy of signaling appropriate behavior, and negatively with ordering students to stop; punishing, threatening, or yelling; blaming; and criticizing, scolding, or sarcasm. Here again we see that the observers' ratings were particularly associated with the teachers' personal qualities of likability and warmth. In particular, the observers tended to give low ratings to teachers who were blaming, rejecting, or hypercritical.

The correlations for the coders' ratings differed from those for the principals and those for the observers. Like the principals' ratings, the coders' ratings correlated positively with compliance out of fear. However, the remaining correlations with child behavior measures suggest a somewhat more positive picture than the parallel correlations for the principals' ratings do. The coders' ratings showed a near-significant positive relationship with willing compliance and a significant negative relationship with grudging compliance. Correlations with teacher strategies included positive relationships with citing rules, signaling appropriate behavior, cueing through asking questions, using behavioral isolation, and praising peers as a behavior modification technique, and there was a negative relationship with punishing, threatening, or yelling. The teachers rated highly by the coders, then, were similar to those rated highly by the principals in that they appeared to be skilled classroom managers, but they tended somewhat more toward behavior modification techniques and less toward "policing" techniques. Yet, there was no suggestion that these teachers were unusually warm or personally likable, as there was with the teachers rated highly by the observers.

The teachers' self-ratings correlated positively with willing compliance by the students and with the teacher strategies of ignoring, looking for the next opportunity to praise, and using touch or physical presence to regain attention. These are all very low key strategies, suggesting either that these teachers did not have very serious misbehavior problems in their classrooms or that they tended to react minimally to the problems that did occur (at least on the days that we observed them).

The next set of data in Table 6 concerns the rationales that accompanied teachers' behavioral demands on students. These data indicate that the teachers rated highly by the coders and by the observers were especially likely to accompany their behavioral demands with rationales. Those rated highly by coders were likely to appeal to existing rules or stated expectations or to appeal to safety considerations. Those rated highly by the observers were likely to make logical appeals designed to convince misbehaving students that they were acting contrary to their own best interests. The principals' and teachers' self-ratings showed weaker but still positive relationships with the giving of rationales for behavioral demands. The teachers rated highly by the principals were likely to appeal to existing rules or stated expectations, and teachers who rated themselves highly were likely to use "I" statements or otherwise make personal appeals to the students.

The percentage of time that the teachers were characterized as managing the classroom (as opposed to instructing the students) showed a strong negative correlation with observers' ratings but did not reach significance for other ratings. Similarly, teachers who were rated highly by the observers tended to be described by those observers as having an authoritative (rather than either an authoritarian or laissez-faire) orientation toward classroom discipline. That is, these teachers tended to articulate and enforce rules but also to see that their students understood why the rules were needed, rather than either

"laying down the law" in an authoritarian manner or else letting the students do largely as they pleased. Here again, though, the correlations were not significant for the other three sets of ratings. Teachers rated highly by the observers were also coded as not seating particular students away from the rest of the class, as being in a classroom and general milieu that was free from physical or outside impediments to good classroom management, and as undisturbed by the presence of the observer. Again, correlates with other ratings were not significant except for a tendency for teachers who rated themselves highly to be coded for being burdened with outside impediments to effective classroom management.

Correlations with measures of teacher and school characteristics. Table 7 presents correlations linking measures of teacher and school milieu characteristics with grade level, location, and the various effectiveness ratings. Most significant correlations are for location and for the coders' ratings.

The location data indicate that there were both more students per school building and more students per class in Big City than in Small City; that there were fewer Mexican-American students but more black students in Big City (in fact, most of the Big City schools were entirely or almost entirely black); that the Big City teachers were somewhat older and more experienced than the Small City teachers; that the Big City teachers were more likely to seat students according to ability groups; and that, even though they taught larger classes, the Big City teachers had less access to assistance from teacher aides. Surprisingly, there were no differences in student turnover rates or in reported incidents of violence and vandalism in recent years.

Except for the coders' ratings, the teacher effectiveness ratings tended not to correlate significantly with these measures of teacher and student milieu characteristics. There was a slight tendency for the principals' ratings and the teachers' self-ratings to be higher for teachers with more years of

Table 7

Correlations Between Measures of Teacher and School Characteristics and Grade Level, Location, and Teacher Ratings Made by Principals, Observers, Coders, and Teachers Themselves[a]

Teacher and School Milieu Characteristics	Upper Grades	Big City	Principal	Observer	Coders	Teachers
School size	17	53			-32	
Average class size in this school		84			-41	
Incidence of violence, last three years						
Incidence of vandalism, last three years						
Number of students in this class	19	46			-28	
Percentage of males in this class						
Percentage of black students in this class		87			-30	
Percentage of Mexican-American students in this class		-64				
Years of teaching experience	-17	18				18
Years at this grade level	-21	26	18			
Annual turnover rate in this school						
Teacher seats students according to ability groups		23		-23		
Availability of a teacher aide (hours per week)		-25			23	23
Aide used as housekeeper						
Aide used as second teacher						

[a]Decimal points are omitted from the correlation coefficients and only those coefficients that reached the .05 level of significance are shown.

experience and for observers' ratings to be higher for teachers who did not seat the students according to ability groups than for teachers who did use ability group seating. These various effectiveness ratings were not correlated with measures of school size, class size, or race/ethnicity of the school population, however.

In contrast, the coders' ratings showed significant negative correlations with school size, class size, and percentage of black students in the class, as well as a positive correlation with the availability of a teacher aide. All of these correlations are part of the same pattern already noted and commented upon: The coders tended to assign higher ratings to the Small City teachers than to the Big City teachers, because the Small City teachers were more likely to mention problem-solving techniques favored by humanistic sources of expert advice to teachers. Even though these Small City versus Big City differences appeared only in the coders' ratings, they were taken seriously and followed up with additional analyses, for two reasons. First, the coders' ratings were based solely on their readings of the interview typescripts, made without knowledge of class size or racial/ethnic characteristics. Second, the coders were the only rating group in a position to make direct comparisons across the two locations (the principals, the observers, and the teachers themselves all worked within only one of the two locations, so that any comparisons involved in their ratings were within rather than across location). Thus, the data from the coders' ratings imply reliable real differences between the teachers in Small City and the teachers in Big City, at least in their responses to our interview questions.

Comparisons between the Small City and the Big City subsamples on scores derived from the coding of interview and vignette responses yielded a great number and variety of differences. Most of these differences, however, fall within two major trends. First, the Small City responses tended to be longer

and more detailed and cognitively complex than the Big City responses. It is not clear whether this was due to differences in the knowledge or attitudes of the teachers themselves, in the effectiveness of the interviewers in eliciting detailed responses, or in other factors (such as the fact that Big City teachers were supposed to leave their buildings prior to "lock-up time" after school, so that they may have felt more time pressure than the Small City teachers when being interviewed). Whatever the reason, Small City teachers usually had more to say in response to particular questions than Big City teachers did, and this was associated with higher ratings by the coders.

The second trend involved the nature of teachers' reported responses to students' problem behavior. Small City teachers much more often reported dealing with problem behavior on the spot, taking the time to talk to the student privately and to implement strategies designed to bring about long-run improvement in the basic problem situation in addition to coping with the problem involved in the immediate situation. In contrast, Big City teachers were more likely either to refer the problem student to the principal or some other resource person for handling or to handle it themselves but concentrate on controlling the student's behavior in the immediate situation. To the extent that Big City teachers talked about strategies designed to achieve long-run solutions to the basic problem, they tended to do so in describing follow-up contracts with the student that would occur later (often after school) rather than in their immediate responses to problem behavior as it occurred. This second trend was especially responsible for the tendency of the coders to rate Small City teachers as more effective in dealing with problem students than the Big City teachers, because it meant that the Small City teachers more often mentioned problem-solving strategies of the kind recommended by humanistic sources of expert advice to teachers.

Analysis of this second trend indicated that it was associated with measures of class size and availability of teacher aides, but not with measures of student race/ethnicity, teacher experience, or other aspects of school milieu. In short, the teachers who were most likely to mention taking the time to deal in depth with student problems as they occurred tended to be the teachers who had smaller classes and more help from teacher aides.

Conversely, the teachers who were more likely to mention referring the problem student to someone else or dealing with the problem student only briefly before returning to instruction of the class as a whole tended to be the teachers who had larger classes and less help from teacher aides (and thus less opportunity to take time out to deal in depth with problems as they arose).

In summary, the higher effectiveness ratings assigned by the coders to the teachers in Small City are understandable in that the Small City teachers gave more lengthy and detailed responses which included more frequent mention of socialization and problem-solving strategies commonly espoused by humanistic sources of expert advice to teachers. However, these differences in the responses of the two groups of teachers apparently occurred at least in part because of differences in working conditions. The smaller classes and greater access to teacher aides enjoyed by the Small City teachers made it more feasible for them to use problem-solving techniques that require teachers to take time out from working with the class in order to interact individually and at length with the problem student.

Summary. Intercorrelations among the four sets of ratings of teachers' effectiveness in coping with problem students were all positive but much weaker than expected, and these ratings also differed in their patterns of correlations with other variables. Even so, three of these sets of ratings (all but the teachers' self-ratings) appeared to capture reliable (but different)

information about the teachers. The principals' ratings appeared to reflect the teachers' effectiveness in managing their classrooms and handling disruptive behavior, the observers' ratings appeared to reflect the degree to which the teachers projected warmth and concern about students and established a positive classroom atmosphere, and the coders' ratings appeared to reflect the degree to which the teachers' interview responses were cognitively complex and emphasized strategies stressed by humanistic sources of expert advice.

Coding System Development

The transcripts of the teachers' responses to our vignettes and strategy interviews were coded for presence or absence of various themes, concepts, and nuances of treatment strategy. Categories for the coding systems were adapted from sources of expert advice to teachers or developed from content analysis of samples of the transcripts themselves. Most of the categories developed from sources of expert advice are in the "universal" coding systems that deal with general issues considered relevant to treatment of all types of problem student. The teachers' responses to each of the vignettes were coded with the Universal system for vignettes, and their responses to each of the strategy interviews (except for the interviews concerning low achievers, which required a somewhat different type of coding because the problem involved limited intellectual ability rather than disturbances in personality or behavior) were coded with the Universal system for interviews. Thus, the Universal system for vignettes produced 24 sets of coding (one for each of the 24 regular vignettes), and the Universal system for interviews produced 11 sets of coding (one for each of the 12 problem student types, except for the low achievers).

Most of the categories developed from content analysis of samples of transcripts are included in the "unique" coding systems developed specifically for each subset of data. There is a Unique system for each of the 24 regular

vignettes and each of the 12 interviews. These Unique systems develop considerable detail about certain of the strategies mentioned only in a more global sense in the Universal systems (strategies which are particularly relevant to the treatment of the problem student type in question, and thus which tend to be discussed in more detail in that set of transcripts), as well as about concepts and strategies which are unique to the responses to that type of problem student.

In the remainder of this report, we describe some of the assumptions and thinking that went into the development of our coding systems and then present some findings on general trends observable in the data from the Universal systems when aggregated across all of the problem student types. Data from the Unique systems will be presented in separate reports (one on each problem student type) that are currently in preparation.

Basic Assumptions Guiding the Development of Coding Systems

The study was focused on problem students in kindergarten through sixth grade, and more specifically on students in these grades who showed disturbance in personality, behavior, or adjustment to school as an institution. Consequently, ideas for conceptualizing and principles for responding to the problems of such students could be found primarily in sources in clinical psychology (especially psychotherapy and child psychopathology), developmental psychology (particularly social and personality development viewed as products of socialization), and educational psychology (including school psychology and special education). The ideas to be found in these sources on dealing with students who have chronic personal or behavioral problems are not as well supported by research data (in particular, not by research data from the classroom context) as the principles for effective classroom organization and group management that have been developed in the last 15 years (Brophy, 1983; Doyle,

1986). However, some research progress has been made and a consensus on some general principles has begun to develop as formerly doctrinaire approaches (psychoanalysis, applied behavior analysis, nondirective counseling) have become more eclectic. Furthermore, even the ideas and principles that do not overlap tend to be merely different rather than contradictory. Thus, it is possible to develop an internally consistent and generally integrated eclectic approach (by combining ideas and principles taken from several sources) that is likely to be more effective than an approach confined to a single source (Brophy, 1983, 1985). Consequently, in developing our coding systems we borrowed ideas from a variety of sources, expecting that at least some of the ideas from each source would prove to be useful elements in the effective treatment of problem students.

We did not formulate in advance and attempt to test an integrated set of principles (either for treating problem students in general or for treating any particular type), because this seemed premature. Instead, we tried to make sure that each specific treatment principle or strategy that was stressed by sources of expert advice to teachers was included in the coding system, and that data were developed on the relationships between teacher use of this principle or strategy and ratings of teacher effectiveness in dealing with problem students. The statistical analyses treated each principle or strategy individually, although we pay attention to patterns and treat the data in a more integrated fashion when reporting the results.

Our development of coding systems proceeded within several constraints and was based on several assumptions. Among the constraints kept in mind were the limitations that schools as organizations place upon teachers and students. Given a student/teacher ratio of approximately 30/1, the pressures to cover the curriculum and meet learning objectives, and the need to maintain signal continuity and momentum (Kounin, 1970) during lessons and to keep students

profitably engaged in appropriate tasks during seatwork activities, there are severe limits on teachers' time and opportunities for dealing with problem students during the day. Teachers stay busy almost continuously during class time, instructing the whole class or a small group or supervising students as they work individually. Unless they have an aide or other adult resource whom they can trust to run the class effectively in their absence, teachers typically cannot take more than a few minutes at a time to deal with individual students, and even here, the conference will have to be held in a corner of the room or in the hallway rather than in a more desirable private setting. Furthermore, no matter how student-oriented and interested in acting as a socializer and counselor he or she may be, the teacher also is an authority figure charged with enforcing school and classroom rules and an instructor charged with leading the students through the academic curriculum. These constraints mean, among other things, that teachers cannot monitor any individual student continuously enough to be able to control behavior through reinforcement with the kind of precision and immediacy that is possible in a laboratory, that teachers do not have the luxuries of time and privacy needed to sustain individual psychotherapy, and that teachers must work within their institutionalized roles rather than being able to adopt the nonjudgmental and nondirective role favored by professional psychotherapists. Thus, we assume that ideas taken from the laboratory or the psychotherapist's office, if usable by teachers at all, must be adapted to the constraints within which teachers work and usable within the teacher's role as authority figure, instructor, and socializer.

We assume that human personality and behavioral predispositions are developed through interaction with the environment (although not necessarily taught systematically by socializers or learned deliberately by children). That is, we assume that although children's physical and intellectual potentials are

partially determined by their genetic makeup, their personal traits and situational behaviors are learned through experience (with the exception of individual differences in physiological arousal levels and associated preferences for stimulation and activity). Individual differences will be determined by the nature of the stimulation and reinforcement to which the child is exposed, but in particular, by the nature of the modeling and socialization the child receives from significant others. Teachers are important significant others in children's lives, especially elementary level teachers who work with the same group of students for five or six hours a day for an entire school year.

Theoretical what has been acquired through socialization can be eliminated or changed through socialization, so that just about any personal or behavioral problem presented by a student should be open to corrective socialization by the teacher. In practice, however, some problems are very difficult to solve because they are well established before the teacher ever enters the picture and are being sustained or reinforced (not necessarily deliberately, but in effect) by family, peer group, or other environmental influences.

Also, children are active and partially self-determining individuals (more so each year as they develop through the elementary school years), so they may resist in varying degrees their teachers' attempts to resocialize them. Thus, although the potential of teachers for having positive socialization influences on their students should not be underestimated, neither should it be overestimated. Teachers usually have students for only one year, have less individualized time with them than the family and peers do, and are more likely to find that the demands that they must make on students when acting as authority figures or instructors impede their progress in forming close, trusting relationships of the kind that motivate students to rely on their teachers as counselors and value their opinions.

We do not assume that all teachers should make student socialization their first priority. This would not be feasible or desirable for most secondary school teachers, and even at the elementary level, as data from our own study and another IRT study (to be discussed) show, teachers who place a heavy emphasis on student socialization in defining the teaching role are not necessarily more effective than other teachers (even at socialization, let alone instruction in the curriculum). However, given the developmental immaturity of children at these grade levels and the historical emphasis on the elementary school as a socializing institution in addition to a place for learning academic knowledge and skills, we do assume that elementary school teachers should accept at least some socialization responsibilities; that is, we assume that such teachers should concern themselves about personal or behavioral problems in their students to the extent of trying to do something about these problems personally and/or seeing that the students get professional help. The degree and nature of teacher involvement in socialization activities can be expected to vary with teachers' role definitions as well as with other factors such as school system regulations, principals' directives and preferences, the availability of professional assistance (social workers, counselors, school psychologists) at the school, and the response of the student and the family. We do assume, however, that if the personal or behavioral problems manifest themselves regularly in the classroom and create problems for the teacher, then direct intervention by the teacher will be necessary (even though treatment professionals or other adults might also become involved). Because the teacher and the students share the history of the development of the class from the beginning of the year and are in continuous contact with each other as they play out their respective roles, it is to be expected that problems that arise in the classroom will have to be handled in the classroom.

We did not expect our interviewing to yield completely new or unique strategies, but we did expect to see which of the many strategies that have been suggested to teachers are reportedly used by them, how they are combined with other strategies, and how teachers assess their strengths and weaknesses. Blanco (1972) conducted a study which was similar in some respects to the present study because it involved soliciting the opinions of school psychologists about appropriate strategies for responding to various student problems. However, these strategies tended to be mentioned in isolation from one another without an attempt at integrating the information and many of them are not feasible for use in the classroom by teachers. Thus, our study was focused directly on ordinary elementary school teachers working in typical classrooms under the usual constraints, and this focus was kept in mind in constructing coding categories.

We assumed that certain general principles would be appropriate for use with students of different grade levels and in different types of school, because both the literature on psychological and behavioral interventions and the literature on classroom management support the notion that there are general principles that apply to most situations (with relatively minor adaptations) over the notion that different kinds of student need radically different techniques. Still, there were hints in the literature that different kinds of students would respond differentially to different treatments (higher social status students might respond relatively better to symbolic rewards, and lower social status students to material rewards; more cognitively developed and articulate students might respond better to analytic and talk-oriented therapy, but less cognitively developed students might respond better to behavioristic approaches or other more structured interventions). Consequently, in addition to analyzing data for the sample as a whole, we analyzed within the Small City and Big City subsamples and within the early grades (K-3) and later grades

(4-6) subsamples. Even here, however, unless the data indicated otherwise, the emphasis was on identifying limitations or needed qualifications on general principles. We did not expect the different subsets of students to be so different as to require dramatically different treatments, and the data bore out this expectation.

We did not have systematic enough data to investigate possible differences in approaches suitable to different kinds of classroom structure (self-contained vs. open space) or teaching arrangements (one teacher with the same class all day vs. various team teaching and grouping arrangements). We did have 17 male teachers in the sample and thus were able to examine teacher gender as a variable affecting the frequency of use of treatment strategies. However, these male teachers were all in the upper grades and were not selected so as to be directly comparable as a group to the female teachers, so the findings to be reported on teacher gender must be taken as suggestive rather than systematic.

We assumed that effective techniques for working with problem students, although important in their own right, would typically be associated with a larger complex of desirable teacher characteristics. In particular, it is difficult to imagine specific strategies for coping with problem students being effective unless the teacher is generally effective in organizing and managing the classroom, is a likable and respectable person, and is a person who models the personal characteristics and behaviors that he or she "preaches" to the students. We also expected a degree of correlation between success in dealing with problem students and success as an instructor, because research on classroom management (Brophy, 1983; Evertson, Emmer, Clements, Sanford, & Worsham, 1984) has shown that instructional skills and managerial skills complement and reinforce each other, and that instructing the students in desired classroom routines and procedures is an important part of effective classroom

management. Similarly, we expected that the ability to provide effective instruction in desirable behavior patterns and problem-solving skills would emerge as an important part of effectiveness in coping with problem students.

Even so, we expected the correlations between teachers' instructional skills and their abilities to deal with problem students to be merely moderate rather than extremely high, and to be more noticeable at the lower end than at the higher end of the distribution of teacher effectiveness; that is, we expected that teachers who were extremely ineffective at instructing students in the curriculum would also be ineffective at dealing with problem students, and vice versa. However, we also expected that many teachers who are outstanding instructors would lack the knowledge or interest to be outstanding at dealing with problem students, and that many teachers who are outstanding at dealing with problem students would be more interested in student socialization than in instruction, and thus would not have made themselves into outstanding instructors. We did not have objective measures of teacher effects to assess these expectations, but our high inference ratings of teachers by classroom observers bear out our expectations of moderate correlations. The ratings of the teachers' probable effectiveness in producing learning gains correlated .50 with the ratings of the teachers' probable effectiveness in producing affective gains (and even this correlation was inflated to some unknown degree by halo effects). These considerations suggest the need to bear in mind that <u>when we use the term "effectiveness" in this report, we refer specifically to the teacher's effectiveness in coping with problem students</u>. The term should not be taken to refer to effectiveness in any more general sense, nor to effectiveness in the specific areas of instructing the students in the curriculum or organizing and managing the classroom as an effective learning environment.

Given our focus on chronic personal and behavioral problems that typically develop gradually over time, we assumed that genuine solutions to such problems would require not merely effective techniques for responding to symptomatic

behavior when it occurs, but also a more general strategy for solving the problem through preventive and remedial activities that would typically include socializing the student (instilling or changing beliefs, attitudes, and expectations) and (depending on the problem) providing needed instruction, developing insight or self monitoring skills, self-control training, or social skills training. In other words, we expected that the most effective teacher response to the students' problem behavior would be not merely to control that behavior but to take steps designed to eliminate the problems that were causing it, to teach the students how to control the behavior themselves, or to use more effective strategies for responding to frustration or solving problems. Thus, the coding typically makes distinctions between short-term and long-term strategies and between strategies designed merely to contain the behavior in the immediate situation and strategies designed to prevent problems from developing or to address underlying causes.

Related assumptions concerned teachers' motivation in coping with problem students. We assumed that teachers' actions motivated primarily by anger or a desire for revenge would be counterproductive, that actions motivated primarily by the desire to eliminate a problem or disruption and get on with instructing the class would be minimal and largely control-oriented (and thus limited in their effects), and that actions motivated by concern about the welfare of problem students and a desire to help them learn better ways to deal with their problems would be most likely to include long-term strategies oriented toward true solution of the problem (rather than merely temporary control of the symptomatic behavior).

Finally, we assumed that there would be orderly relationships among teachers' perceptions of the behavior of problem students, their attributions of these problem behaviors to causes, their beliefs about the possibilities for inducing significant change, their beliefs about the actions that would be

required in order to induce such change, and the decisions they would make about what actions to take. Such relationships were expected to be stronger and more patterned among the teachers who had devoted the most thought to, and had become the most articulate about, student problem behavior and methods of coping with it. In any case, our coding systems were designed not merely to investigate teacher behaviors, but also to investigate associated perceptions, beliefs, attitudes, expectations, and causal inferences.

Ideas from Expert Sources

Many of the categories in our Universal coding systems were based on ideas stressed by sources of expert advice to teachers. The primary sources and ideas were the following.

Applied behavior analysis/behavior modification. Behavioristically oriented writers have advocated that teachers use principles of reinforcement to control student behavior and achievement striving. The basic principles involve eliciting desirable behavior through cueing and shaping and maintaining it through reinforcement, and limiting the frequency of undesirable behavior by withholding reinforcement or (if necessary) punishing. Early applications were unsatisfactory to most teachers because they concentrated on behaviors such as staying in the seat and being quiet (rather than engaging actively in tasks and learning efficiently) and because they required the teacher to continuously circulate the room and dispense material reinforcers such as candy or trinkets. More recently, however, behavioristic methods have become better adapted to classroom realities. The emphasis has switched from reinforcing passivity to reinforcing learning efforts and accomplishments, and from dispensing consumable reinforcers to dispensing verbal praise and symbolic reinforcers or offering students activity reinforcers (opportunities to play games or engage in other attractive recreational activities) as rewards for successful completion

of requirements. Furthermore, instead of constantly attempting to reinforce molecular behaviors, teachers (often using formal performance contracts, but not necessarily) reinforce students only after they have completed assignments acceptably or met conduct standards over the course of a day or week. There are a great many books on behavior modification intended for regular classroom teachers. Of these, we found the volume by O'Leary and O'Leary (1977) to be particularly valuable.

Cognitive behavior modification. As behaviorists worked on contingency contracting and other classroom applications of behavioral techniques, they discovered that goal setting, self-monitoring of behavior, and self-evaluation of progress toward goals all can have desirable effects on student performance, independent of the effects of reinforcement. Follow-up research established that there is value in teaching students to set appropriate goals, and especially, to control and monitor their own behavior (Glynn, Thomas, & Shee, 1973; McLaughlin, 1976; O'Leary & Dubey, 1979; Rosenbaum & Drabman, 1979). Furthermore, Meichenbaum (1977) and others have shown the value of strategy training techniques that combine modeling with verbalized self-instructions. Rather than just tell students what to do, teachers demonstrate the process, not only by going through the physical motions involved but also by verbalizing the thoughts and other self-talk (self-instructions, self-monitoring, self-reinforcement) that should accompany these actions. Such methods have proven useful not only for training students to cope with academic tasks but also for helping aggressive students to learn to control anger and respond more effectively to frustration and for helping failure syndrome students to learn to respond to mistakes with problem-solving efforts rather than withdrawal or resignation.

Dreikurs. Several psychoanalytically oriented writers have advised teachers to look upon specific behavioral problems as mere surface symptoms of

larger underlying personality disturbances. Many of these sources are of little use to teachers because they concentrate on speculating about the causes of students' problems without saying much about what can be done to solve them or because they advocate techniques such as play therapy that are too indirect and time-consuming. Dreikurs (1968), however, provides useful guidelines to teachers based on conceptualizing disturbed students as reacting to feelings of discouragement or inferiority by developing defense mechanisms designed to protect their self-esteem. He believes that students who do not achieve satisfactory personal and group adjustments at school will begin to show symptoms interpretable as seeking after one of the following goals (listed in increasing order of disturbance): attention, power, revenge, or display of inferiority. He suggests that teachers determine the purpose of students' symptoms by analyzing the goals that they seem to be pursuing and the effects that their behavior are having on the teacher. He also suggests that teachers establish personal relationships with students, interview them at length to understand their behavior from the students' point of view, and counsel them to help them develop better insight into their behavior (this includes sharing beliefs about the goals that the students apparently are seeking to achieve). Presumably the achievement of such insight will eliminate the students' need to continue the symptomatic behavior, although Dreikurs also counsels a general approach of support and encouragement for such students.

Gordon. Gordon (1974) advocates what he calls the "no lose" approach to solving problems and conflicts. The approach begins with an effort to analyze problem ownership: People "own" a problem to the extent that the problem causes their need satisfaction to be frustrated (so it is "their" problem). In the classroom, the teacher owns the problem when the teacher's need satisfaction is being frustrated (such as when a student persistently disrupts the class by talking to friends). Conversely, students own the problem when their

need satisfaction is frustrated (such as when a student is rejected by the peer group). Teachers and students share problem ownership when each is frustrating the need satisfaction of the other (such as in Vignette #3, Table 2, when a hyperactive student's mishap both brings on peer rejection and interrupts the flow of the classroom activity).

Gordon states that student-owned problems call for the teacher to provide sympathy and help, especially in the form of "active listening" (not merely listening to students and trying to understand problems from their point of view, but actively reflecting their statements back to them in order to show that they have been understood accurately and also listening for the personal feelings and reactions that students express and reflecting these as well). When teachers own the problem, Gordon advocates using "I" messages to describe the student's behavior, show how it frustrates the teacher's need satisfaction, and specify the effects of this on the teacher's feelings. Theoretically, such "I" messages will be more effective in getting problem students to recognize and be willing to change their inappropriate behavior than "you" messages that criticize the students and provoke resentment. Gordon believes that the combination of active listening and "I" messages will help teachers and students to achieve shared rational views of problems and to cooperate in seeking solutions to conflicts. He advocates the following six-step "no lose" method for finding solutions that satisfy all concerned: (a) define the problem, (b) generate possible solutions, (c) evaluate those solutions, (d) decide which is best, (e) determine how to implement the solution, (f) assess the effectiveness of the solution after it is implemented (a new agreement must be negotiated if the solution is not working satisfactorily to all concerned).

Glasser. William Glasser is known to many teachers for his advocacy of what he calls "reality therapy" techniques to classroom management and problem solving. In Schools Without Failure (Glasser, 1969), he advocated that

teachers schedule regular classroom meetings in which to work jointly with the students to establish classroom rules, adjust the rules or develop new ones when needed, and deal with interpersonal problems. He advocated that the teacher act as a group facilitator here, keeping the meeting focused on the agenda but pressing the students to suggest and develop agreement on solutions to problems rather than acting as an authority figure. Other writers have also advocated such classroom meetings and some have even developed methods and materials for teachers to use in managing groups, such as the "Magic Circle" or "Human Development" program (Ball, 1974) and the DUSO (Developing Understanding of Self and Others) program (Dinkmeyer, 1970).

More recently, Glasser (1977) has advocated his "ten steps to good discipline" for use with students who do not respond to generally effective classroom management. Starting with Step 4, each step gradually escalates the seriousness of the problem, so the teacher is advised not to move to the next step unless absolutely necessary. The ten steps are as follows:

1. Select a student for concentrated attention and list typical reactions to that student's disruptive behavior.

2. Analyze the list to see what techniques do and do not work, and resolve not to repeat the ones that do not work.

3. Improve one's relationship with the student by providing extra encouragement, asking the student to perform special errands, showing concern, and implying that things will improve.

4. Focus the student's attention on the disruptive behavior by requiring the student to describe what he or she has been doing. Continue until the student describes the behavior accurately, and then request that the behavior be stopped.

5. Call a short conference. This time, have the student not only describe the behavior but also state whether or not it is against established rules or expectations. Then ask the student what he or she should be doing instead.

6. Repeat Step 5, but this time add that a plan will be needed to solve the problem. This will involve more than a simple agreement to stop misbehaving, because such agreements have not been honored in the past. The negotiated plan must include the student's commitment to positive actions designed to eliminate the problem.

7. Isolate the student or use time out procedures. During time out, the student will be charged with devising a plan for ensuring that rules will be followed in the future. Isolation will continue until the student has devised such a plan, gotten it approved by the teacher, and made a commitment to follow it.

8. If this does not work, the next step is in-school suspension. Now the student must deal with the principal or some other authority figure, but this other person will repeat earlier steps in the sequence and press the student to come up with an acceptable plan. It is made clear that the student will either return to the class and follow the reasonable rules in effect there or continue to be isolated outside of class.

9. If students remain out of control or in in-school suspension, their parents are called to take them home for the day, and the process is repeated starting the next day.

10. Students who do not respond to the previous steps are removed from school and referred to another agency.

Good and Brophy. Good and Brophy (1986, 1987) present a variety of guidelines for dealing with problem students that include those advocated by the sources mentioned above but also involve principles drawn from the literature on socialization in the home and the literature on expectations and self-fulfilling prophecy phenomena. The literature on parenting suggests that the most effective socialization strategies over the long run are those that do not merely exert control over children's behavior but gradually induce self-control by encouraging the internalization and adoption of prosocial beliefs, attitudes, and behaviors. The adult socializers act as authority figures and sources of behavioral guidelines, so that their socialization is neither laissez-faire nor "democratic" (in the sense that votes are taken and the majority rules). Nor do they take an authoritarian approach. ("You'll do it because I say so!") Instead, their socialization is what Baumrind (1971) describes as "authoritative": their demands are based on Golden Rule morality and other principles of ethical and prosocial human behavior, and they take care to see that children learn the rationales underlying these demands in addition to the demands themselves. Inappropriate social behavior is criticized because it violates general principles and the rights or well-being of injured parties and

not merely because it embarrasses or inconveniences the socializers. The emphasis is on learning how to act and be accepted as a good person who treats others with consideration and respect, rather than on avoiding getting caught and punished for misbehavior.

Several guidelines concerning the development of children's expectations and self-concepts flow from the literature on the communication of expectations, labels, and attributions of behavior to causes. Assuming that adult socializers have personal characteristics likely to cause them to be adopted as models by children (Bandura, 1977) and that they are respected as accurate observers and sources of information, it is likely that children will acquire the beliefs, attitudes, and expectations that these socializers model and articulate. These include beliefs, attitudes, and expectations about the children themselves (whether they are basically good or evil, whether they are trying to do the right thing, whether they will be able to do the right thing if they try). To the extent that socializers project positive expectations (and associated labels and attributions) to problem children (e.g., that they are basically normal and well meaning individuals who want to improve their behavior and will do so if given proper help), such projection will tend to help ensure that those expectations become fulfilled. Adult socializers are likely to frustrate their own efforts, however, if they project negative expectations (e.g., using labels implying that the problem students are deviant or defective, making statements or implying that they cannot or do not wish to change).

Most of the categories in our Universal coding systems were developed from the expert sources described above.

The Universal System for Coding the Interviews

The categories in the Universal system for coding the teachers' general strategy interview transcripts are shown in Table 8. This system was used with

Table 8

The Universal System for Coding Interview Responses

A. Problem-Solving Strategies

A0. Not a problem
A1. Nothing to be done
A2. Delegate to other authority
A3. Extinguish/ignore
A4. Minimal intervention/redirect
A5. Humor/tension release
A6. Minimize stress/embarrassment
A7. Inhibit through physical proximity/voice control/eye contact
A8. Support through physical proximity/voice control/eye contact
A9. Time out: extinction/removal
A10. Time out: calm down/reflect
A11. Diagnosing
A12. Criticize
A13. Threaten/punish
A14. Proscribing: limits/rules/expectations
A15. Appeal/persuade
A16. Contracts/commitment to goals
A17. Prescribing/telling/instructing/eliciting
A18. Direct modeling
A19. Indirect modeling
A20. Praise
A21. Reward
A22. Encouragement/positive expectations
A23. Comfort/reassurance
A24. Kid gloves
A25. Eliminate source of problem
A26. Counseling/producing insight
A27. Build self-concept
A28. Relationship
A29. Change task
A30. Change physical environment/isolation
A31. Change social environment
A32. Group work
A33. Involve peers for support
A34. Involve peers to pressure/punish
A35. Involve parents for support or problem solving
A36. Involve parents to pressure/punish
A37. Involve school-based professionals to support or problem solve
A38. Involve school-based authority figures or professionals to pressure/punish
A39. Involve outside medical or mental health professionals
A40. Work with/counsel parents
A41. Academic help

B. Student Input

B0. None
B1. Information only
B2. Offer limited choices/opportunities for input
B3. Allow or require student to suggest solutions

C. General Problem-Solving Approach

C0. None/can't rate
C1. Control/suppress undesirable behavior
C2. Shape desirable behavior
C3. Solve problem: instruction/training/modeling/help
C4. Help student cope with problem
C5. Identify and treat external causes
C6. Insight
C7. Appeal/persuade/change attitudes
C8. Encourage/reassure/build self-concept/provide supportive environment

D. Long-Term Prevention/Cure Vs. Situational Control

D1. Contains long-term prevention/cure strategies

G. Differentiated Strategies for Different Subtypes

G0. No subtypes
G1. No linkages of strategies to subtypes
G2. Differentiated strategies

Table 8 (cont'd.)

H. Problem Ownership
- H0. None
- H1. Partial
- H2. Full responsibility

I. Teacher's Motivation
- I0. None/can't rate
- I1. Survival/concern about self
- I2. Instructional concerns
- I3. Group functioning/group safety
- I4. Concern about the problem student
- I5. Prepare individual for better future life
- I6. Society's needs
- I7. Promote morality
- I8. Upholding school rules
- I9. Personal irritation/anger
- I10. Other

K. Punishment
- K0. None
- K1. Immediate
- K2. Backup
- K3. Last resort

L. Gets More Information
- L0. None
- L1. Observe
- L2. Interview student
- L3. Interview parents/siblings
- L4. Interview peers
- L5. School records, past teachers, principal
- L6. Professional assessment
- L7. Other

11 of the 12 sets of interviews (many of the categories are inappropriate for coding the interviews concerning the low achievers, so this system was not used with those interviews).

A. Problem-solving strategies. The categories in Section A describe the problem-solving strategies that are mentioned frequently in the teachers' responses. Category A0 (not a problem) is used if the teacher says that the behavior is not a problem and therefore does not feel the need to do anything about it, and Category A1 (nothing to be done) is used if the teacher recognizes the behavior as problematic but believes that nothing can be done about it (and therefore chooses to do nothing).

Category A2 (delegates to other authority) is used when the teacher does not deal with the problem student personally but does refer the student to the principal or some other school authority figure for action. Thus, the first three categories cover situations where the teacher personally does nothing designed to address the problem behavior. Of these, only Category A2 was coded frequently.

Category A3 (extinguish/ignore) is used when the teacher mentions deliberately ignoring instances of problem behavior in an attempt to extinguish the behavior. Statements coded in Category A3 are distinguished from those coded in A0 or A1 in that the teacher recognizes the behavior as a problem and believes that something can be done about it (but also happens to believe that an effective treatment will be to extinguish the behavior by ignoring it).

Category A4 (minimal intervention/redirect) is coded when the teacher would not simply ignore the problem behavior but would intervene in a minimal fashion, such as by redirecting the student to another activity (without calling attention to the problem behavior). Here, the teacher treats the behavior as a minor situational problem and uses techniques such as those recommended by Kounin (1970).

Categories A5 and A6 apply to situations in which the problem student is likely to become anxious or embarrassed. Category A5 (humor/tension release) is used when the teacher attempts to break the tension with a humorous or distracting remark, and A6 (minimize stress/embarrassment) is used when the teacher mentions taking some action (such as sending the student on an errand out of the room) designed to minimize the stress on the student or spare the student from further embarrassment.

Categories A7 and A8 refer to the teacher's use of nonverbal communication through physical proximity, eye contact, or tone of voice. Category A7 (inhibit through physical proximity/voice control/eye contact) is used when the teacher speaks of inhibiting undesirable behavior through such nonverbal communication, and A8 (support through physical proximity/voice control/eye contact) is used when the teacher speaks of communicating support to the student in these indirect ways.

Categories A9 and A10 describe the teacher's use of time-out procedures. Technically, the term "time out" refers to removal of a student from a classroom in which a token economy is in effect (and thus to removal from opportunity to earn tokens, points, or other reinforcement credits). However, the term is also used more loosely to refer to removal of the student from a class or group activity by sending the student to a corner of the room, out into the hall, or to the office. In this study, use of Categories A9 or A10 usually implied the latter meaning, because we never observed token economies and only a few teachers used point systems attached to reinforcement menus. Category A9 (time out: extinction/removal) was used when the teacher described the time-out procedure as intended to deprive the student of an opportunity to gain rewards (sometimes credit toward reinforcement, but more typically just the opportunity to be a part of the class). Category A10 (time out: calm down/reflect) was used when the teacher described the time-out procedure as

providing the student with an opportunity to escape the pressure or embarrassment that had led to loss of control, and to take some time to be alone, calm down, reflect on the incident, and regain composure. Category A9 is essentially a punitive use of time out, whereas Category A10 is a facilitative use.

The next four categories describe teacher attempts to exert control over student behavior through verbal communication. Category A11 (diagnosing) is used when the teacher publicly "diagnoses" the student's intentions and behavior. Although similar in some respects to techniques mentioned by Dreikurs (1968) and others (interpreting the goal of symptomatic behavior and explaining this to the student), this kind of "diagnosing" is more of an attempt to embarrass than to be helpful to the target student. It is done publicly, and it has a "You can't fool me, I know what you're doing" flavor to it.

Category A12 (criticize) is used when the teacher criticizes the problem student for behaving inappropriately. This is severe personal criticism or scolding, rather than a neutral description of the student's behavior. Category A13 (threaten/punish) is used whenever the teacher punishes the problem student or threatens to do so. This does not include time out (A9, A10) or physical isolation (A30), but otherwise it includes any kind of loss of privilege or other punishment. Category A14 (proscribing: limits, rules, expectations) is used whenever the teacher initiates or reminds the student about limits, rules, expectations, or proscriptions on behavior in the classroom (e.g., tells the student what is <u>not</u> allowed).

Category A15 (appeal, persuade) is used when the teacher attempts to appeal to reason or persuade the student to see the wisdom in a recommended course of action. Here the teacher justifies or stresses the reasons behind the demands made on the student.

Category A16 (contracts/commitment to goals) is used when the teacher mentions using formal performance contracts or at least seeking to get a commitment from the student to strive to meet agreed-upon goals. The idea here is that the teacher goes beyond merely telling the student what to do, and even goes beyond offering incentives, by seeking to extract a prior commitment from the student. Rewards may be involved if the student fulfills the commitment, but this is not necessary to the coding of the category.

Category A17 (prescribing/telling/instructing/eliciting) is the positive side of Category A14. A17 is used when the teacher prescribes, instructs, or otherwise makes sure that the student knows what is expected, either by telling the student or eliciting this from the student. The emphasis in A14 is on what not to do; the emphasis in A17 is on what to do.

Categories A18 and A19 are used when the teacher mentions modeling of desirable behavior. Category A18 (direct modeling) is used when the teacher would model this directly and call attention to the modeling in dealing with the student. Category A19 (indirect modeling) is used when the teacher would make a deliberate effort to model the behavior consistently, but would try to "reach" the student indirectly rather than call the student's attention to the modeling directly.

Category A20 (praise) is used whenever the teacher mentions praising the student's desirable behavior, and A21 (reward) is used whenever the teacher mentions rewarding such behavior. Category A22 (encouragement/positive expectations) is used when the teacher mentions systematically providing encouragement or positive expectations to problem students who are discouraged or who may need to see that they are improving even though they have not yet eliminated their problems. Category A23 (comfort/reassurance) is used when the teacher mentions providing comfort or reassurance to students who have become anxious or upset, and A24 (kid gloves) is used when the teacher mentions that the

student can easily become upset or frustrated and thus needs special consideration ("kid gloves" treatment), at least temporarily.

Category A25 (eliminate source of problem) is used when the teacher believes that the problem behavior stems from some source in the student's home or school social life, and speaks of trying to identify and eliminate this source of the problem. Category A26 (counseling/producing insight) is used when the teacher mentions active listening, counseling and guidance, interpretation of the meanings of behavior, or other techniques designed to provide the student with information or insight that will presumably lead to elimination of the problem. Category A27 (build self-concept) is used when the teacher specifically mentions using strategies such as praising accomplishments, calling attention to progress, or arranging for success experiences, with the intention of building up the student's self-concept. Category A28 (relationship) is used when the teacher mentions the importance of establishing a close personal relationship with the problem student and working within that relationship to help solve the problem.

The next three categories all involve environmental changes made in an attempt to help the problem student. Category A29 (change task) is used when the teacher believes that a change in task (level or type of assignment, etc.) will be beneficial. Category A30 (change physical environment/isolation) is used when the teacher would change the student's seat, place the student in an isolated spot in the room, provide access to a study carrel, or otherwise change the student's physical environment. Category A31 (change social environment) is used when the teacher mentions deliberate changes (other than physical isolation) in the student's social environment (seating the student among a group of peers who are all easy to get along with; moving the student away from a peer with whom he or she tends to get in trouble).

The next three categories are used when the teacher mentions involving the peers in attempts to solve the problem. Category A32 (group work) is used when the teacher uses classroom meetings or other group activities to discuss the problem directly or to deal with it indirectly by conducting social education activities that are scheduled with the problem student specifically in mind (lessons on dealing with frustration or conflict aimed at hostile-aggressive students, lessons on social assertiveness aimed at shy students, etc.). Category A33 (involve peers for support) is used when the teacher would involve the class as a whole or particular individual peers in providing support to the problem student (explaining to the class that the problem student needs their understanding and patience; appointing one or more peers to act as "buddies" to the problem student). Category A34 (involve peers to pressure/punish) is used when the teacher would involve the peers to pressure or punish the problem student (by actually encouraging them to do so, or more typically, by letting it be known that the class as a group has lost out on some privilege because of the behavior of the problem student).

The next five categories deal with involvement of other adults in the problem. Category A35 (involve parents for support or problem solving) is used when the teacher would contact the parents and use them as resources in helping to determine the nature of the problem, develop responses to it, or provide support to the student. Category A36 (involve parents to pressure/punish) is used when the teacher mentions contacting the parents but primarily to ask them to pressure or punish the problem student. Categories A37 and A38 refer to involvement of school-based authority figures (the principal, typically) or professionals (school psychologists, social workers, counselors). Category A37 (involve school-based authority figures or professionals to support or problem solve) is used when this involvement is intended to be supportive or helpful to the problem student, and A38 (involve school-based authority figures or

professionals to pressure/punish) is used when this involvement is solicited primarily to pressure or punish the student. Category A39 (involve outside medical or mental health professionals) is used when the teacher calls for referring the problem student to outside physicians or mental health professionals for diagnosis or treatment.

Category A40 (work with/counsel parents) is used if the teacher does not merely use the parents as resources and provide them with general suggestions (as in A35), but speaks of acting as a counselor who would work with the parents to improve their skills for coping with the problem student. Here, the teacher works at length with the parents as well as with the student.

Finally, Category A41 (academic help) is used when the teacher would provide academic help to the problem student (extra tutoring, etc.). Any purely academic help is placed into this category; all of the previous categories refer to teacher strategies intended to deal with the personal or behavioral aspects of the student's problem.

These problem-solving strategy categories, as with most categories in our coding systems, were coded as present or absent based on a reading of the entire interview transcript. Thus, in the coding of any particular teacher's response to the interview questions dealing with (for example) strategies for coping with hostile-aggressive students, each of the strategies that the teacher mentioned using at some point during the interview response would be coded "1" and the unmentioned strategies would be coded "0." These scores would then be used in later analyses. In addition, they would be used in computing sum and proportion scores conveying information about clusters of related strategies. In this system, sum and proportion scores were computed for problem-solving strategies, shaping strategies, pressuring strategies, counseling strategies, and supportive strategies. For example, categories A9 (time out for extinction or removal purposes), A11 (diagnosing), A12 (criticizing), A13 (threatening or

punishing), A34 (involving peers to pressure or punish), A36 (involving parents to pressure or punish), and A38 (involving school-based authority figures or professionals to pressure or punish) were all considered pressuring strategies. A sum score for pressuring strategies was computed by counting one point for each of these categories that was coded in the teacher's interview transcript. Thus, a teacher who used none of these strategies would be scored "0," a teacher who used three of these strategies would be scored "3," and so on.

These sum scores were then used to compute proportion scores by dividing the sums by the total number of codes made for that teacher in the problem solving strategies section of the coding system. Thus, if a teacher had a total of 10 codes in the problem-solving strategies ("A") section of the coding system, and if two of these were pressuring strategies as defined above, that teacher would be assigned a sum score of two and a proportion score of 0.20 for use of pressuring strategies. Similar sums and proportions would be computed for problem solving, shaping, counseling, and supportive strategies.

B. Student input. These categories were used for coding the degree to which the teacher solicited input from the problem student in determining what to do about the student. Teachers who acted without soliciting any information at all from the student were coded B0 (none). Teachers who did talk to the student but only to get information were coded B1 (information only). The teachers coded B2 (offer limited choices/opportunities for input) were those who decided unilaterally about the general line of response to take but offered the student choices or opportunities for input within specified limits. For example, such a teacher might decide that the problem student had to make up an assignment either during recess or after school but would offer the student the choice of whether to stay in and work on the assignment during recess or to go out during recess but stay after school to complete it. Or, the teacher might

decide that a performance contract was in order but consult with the student about the nature of the rewards to be offered or about the performance specifications that would be written into the contract. Teachers who were coded B3 (allow or require the student to suggest solutions) were those who solicited more fundamental kinds of input from the student in developing ideas about how to respond to the problem. Some of these teachers used Glasser's suggested technique of requiring problem students to develop plans for solving problems. Others were teachers who entered into cooperative problem solving discussions with the students, during which they solicited and took seriously whatever suggestions the students could offer about how to handle the problem.

C. General problem-solving approach. Whereas the categories in Section A dealt with specific problem-solving strategies, the categories in Section C describe more general approaches to dealing with the problem student. Category C0 (none/can't rate) was used for teachers who made no attempt to deal with the problem or merely delegated it to someone else. Category C1 (control/suppress undesirable behavior) was used for approaches that were limited to controlling or suppressing the undesirable behavior, without doing any of the other things described in Categories C2-C8. The teachers coded C0 or C1 were coded only in that category; however, teachers coded in Categories C2-C8 were coded in as many categories as applied.

Category C2 (shape desirable behavior) was coded for teachers who used the general approach of attempting to shape desirable behavior through cueing and reinforcing the student. The emphasis here was on shaping through reinforcement rather than on providing information through instruction. In contrast, Category C3 (solve problem: instruction/training/modeling/help) was used for teachers who construed the student's problem as primarily one of ignorance about how to behave appropriately and who responded by providing instruction, training, modeling, or other forms of help designed to enable the student to

recognize and eliminate the problem. Category C4 (help student cope with problem) also was used for approaches that involved giving help to the student, but this help was limited to teaching the student strategies for coping with the problem (as opposed to eliminating or solving the problem). Thus, teachers who spoke of eliminating aggression problems by teaching aggressive students to respond more maturely to frustration and to negotiate non-aggressive solutions to conflicts were coded C3, but teachers whose instruction and help were confined to assisting students to learn to inhibit aggression (by counting to 10 before taking action, by walking away from conflict situations until they calmed down, etc.) were coded C4.

Teachers coded in Category C5 (identify and treat external causes) were those who construed the problem behavior as symptomatic of some underlying cause, and spoke in terms of identifying and eliminating this cause. Category C6 (insight) was used for teachers who spoke of using counseling or other techniques designed to increase the problem student's insight into the causes and meanings of the problem behavior. Category C7 (appeal/persuade/change attitudes) was used for teachers who attempted to change the problem student's beliefs or attitudes (and thus his or her behavior) through persuasion or appeal to reason. Finally, Category C8 (encourage/reassure/build self-concept/provide supportive environment) was used for teachers who spoke of providing encouragement, reassurance, a supportive environment, or other supportive treatment designed to develop a more positive self concept and greater confidence in the problem student.

D. Long-term prevention/cure vs. situational control. Teachers whose interview responses contained mention of at least some general strategies to prevent or minimize the problem behavior or to develop a long-term solution to the basic problem were coded "1" in Section D. In contrast, teachers whose responses were confined to reacting to problem behavior in the immediate

situation, without significant follow up or attention to long-term prevention or problem solving, were coded "0."

G. Differentiated strategies for different subtypes. These categories were used to code the degree to which the teachers made distinctions among different subtypes of problem student subsumed within the more general label (for example, students who were rejected by their peers because they were selfish or argumentative vs. students who were rejected by their peers because they were unkempt or unwashed). Category G0 (no subtypes) was used for teachers who made no distinctions among subtypes. Category G1 (no linkages of strategies to subtypes) was used for teachers who did make such distinctions but did not mention differential or specific treatment for each of the subtypes. Finally, Category G2 (links differentiated strategies to subtypes) was used for teachers who did suggest (at least somewhat) different strategies for different subtypes (for example, work on making friends and on resolving conflicts nonaggressively for the students who are rejected because of their selfishness or argumentativeness, but work on hygiene and grooming with students rejected for being unkempt and unwashed).

H. Problem ownership. These categories were used for coding the ownership of the problem as construed by the teacher. Category H0 (none) as used when the teacher owned the problem and the student did not (e.g., the student was seen as the cause). Category H1 (partial) was used when the teacher assumed partial responsibility for causing the problem, which was construed as a shared problem in which both the teacher and the student were frustrating the other's need satisfaction. Finally, Category H2 (full responsibility) was used if the teacher assumed full responsibility for causing the problem, construing it as a student-owned problem in which student need satisfaction was being frustrated by inappropriate teacher behavior (this response was very rare in our data, and

was essentially inappropriate given our portrayals of chronic problems that students brought with them into the class at the beginning of the year).

I. Teacher's motivation. We did not question teachers directly about the motives that lay behind their responses to problem students, but these motives often were stated or at least implied clearly enough to be coded. Frequently, in fact, the teacher's response was coded for two or more different motives.

Category I0 (none) was used when no motive was stated or could be inferred. Category I1 (survival/concern about self) was used when the teacher spoke of taking particular actions out of concern about his or her own well-being or survival in the classroom. ("If I don't show who's boss in that situation, I'll lose the respect of the students for the rest of the year.") Category I2 (instructional concerns) was used for teachers whose actions were driven by instructional concerns. ("I can't allow that sort of behavior because it disrupts the lesson. I'm there to teach and the students are there to learn.")

Category I3 (group functioning/group safety) was used for teachers whose motives included concern about group safety or smooth group functioning. ("I can't allow an aggressive student to injure other students or create an atmosphere of fear.") Category I4 (concern about the problem student) was used when the teacher's response strategies appeared to be motivated primarily by personal concern about the problem student. Sometimes teachers stated such concern directly ("My heart goes out to such a child"), although indirect allusion to such motivation was more typical. Often, in fact, the teachers coded in Category I4 were not so much concerned personally about the individual problem student as they were accepting of a general responsibility to do whatever they could for any of their students. Teachers coded in Category I5 (prepare individual for better future life) also expressed concern for the welfare of the problem student, but here the emphasis was explicitly on preparing the

student for a better future life. ("If I don't do something about this problem now, he's headed for a life of misery or criminality.")

Category I6 (society's needs) was used when the emphasis was more on the welfare of society than on the happiness of the individual problem student. ("I have a responsibility not merely as a teacher but as a concerned citizen to do something about this type of problem; such individuals become an intolerable burden on society.") Category I7 (promote morality) was used for teachers who took a moralistic approach. ("I would try to make him see that his behavior is unjust--that it is wrong to treat other people that way.")

Category I8 (upholding school rules) was used when teachers mentioned their responsibility to uphold school rules as a motive underlying their actions. Such rules would include school district mandates, principals' directives, and school rules agreed upon by the school staff acting as a group. Category I9 (personal irritation/anger) was used when the teacher's actions appeared to be motivated by a personal irritation with, anger at, or desire to gain revenge against the problem student. Finally, Category I10 (other) was used when the teacher mentioned a motive that was not included in the previous categories.

K. Punishment. These categories were used to code the extent to which punishment (or threat of punishment) played a role in the teacher's response to the problem student. For purposes of coding, punishment included any punitive actions taken directly by the teacher against the problem student, as well as any contacting of the principal, the parents, or other individuals that was designed to see that the problem student got punished. Category K0 (none) was used for teachers who never mentioned punishment at all. Category K3 (last resort) was used for teachers who did mention punishment but made it clear that it would be used only as a last resort when more positive strategies had been tried but failed. Category K2 (backup) was used for teachers who would not

resort to punishment in their first response to the problem student but would move to it fairly quickly as a backup if the initial strategy did not work. These teachers viewed punishment as a normal strategy to be used when "a word to the wise" was not sufficient, whereas the teachers coded in Category K3 looked upon punishment as a treatment of last resort to be avoided if possible. Finally, Category K1 (immediate) was used for teachers whose immediate response to problem behavior included punishment.

L. Gets more information. These categories were used for coding whether or not the teacher would seek additional information about the problem student, and if so, what sources would be tapped to develop this information. Category L0 was used for teachers who never mentioned getting additional information. The remaining categories were used to indicate the source of the information gathered: personal observation of the student (L1), interviewing the student (L2), interviewing the parents or siblings (L3), interviewing peers at school (L4), reading the student's cumulative record file or consulting with past teachers or with the principal (L5), arranging for assessments by school psychologists, social workers, or other professionals (L6), or obtaining information from some other source not included in the previous categories (L7).

The Universal System for Coding Vignette Responses

Responses to each of the 24 regular vignettes were coded with the Universal system shown in Table 9. There are four major sections to this Universal system: I. General response to the vignette; II. Attributional inferences; III. Attempts to manipulate student behavior through rewards, punishment, support, or threat/pressure; and IV. Commonly mentioned strategies for responding to depicted problem behavior.

IA. Problem seen as part of a chronic pattern. Teachers were coded "1" here if they recognized that the specific problem behavior depicted in the

Table 9

Universal System for Coding Vignette Responses

I. General Response to Vignette

A. Depicted Problem is Understood to Be Part of a Chronic Pattern (not an isolated event)

C. Proactive vs. Reactive vs. Avoidant Response

C1. Proactive response (organized, programmatic)
C2. Reactive response (reacts only briefly to the immediate problem)
C3. Avoidant response (does not deal with the problem at all)

D. Goal of Influence Attempt

D1. Improve mental hygiene or coping skills
D2. Shape through rewards
D3. Control through threat or punishment

Scores on Scaled Variables

B. Imperative vs. Instructive (0-highly or moderately instructive; 1-at least minimally instructive; 2-purely imperative)

F. Inaccurate Perception of Problem Student (1-accurate and precise; 2-generally accurate but imprecise; 3-inaccurate)

G. Lack of Congruence Between Perception and Response (1-integrated response; 2-not integrated, but compatible; 3-contradictory elements)

II. Attributional Inferences

Teachers' Perceptions About the Student

A. Locus of Causality

A1. Internal to student
A2. External to student
A3. Internal-external interaction
A4. Multiple possibilities

B. Controllability

B1. Student responsible
B2. Student not responsible
B3. Both possibilities

C. Intentionality

C1. Student acts intentionally
C2. Student does not act intentionally
C3. Both possibilities

D. Stability

D1. Problem is stable over time
D2. Problem is short lived/unstable
D3. Both possibilities

E. Globality

E1. Problem is generalized
E2. Problem restricted to particular situation
E3. Both possibilities

Teachers' Perceptions About Themselves

F. Locus of Causality

F1. Teacher is cause of problem
F2. Problem external to teacher
F3. Teacher-student interaction
F4. Multiple possibilities

G. Controllability

G1. Teacher can effect change
G2. Change possible/external person needed
G3. Meaningful change not possible
G4. Multiple possibilities

H. Stability

H1. Expects stable improvements
H2. Expects temporary improvements
H3. Both possibilities

I. Globality

I1. Expects generalized improvements
I2. Expects localized/situational improvements
I3. Both possibilities

III. Attempts to Manipulate Student Behavior Through Rewards, Punishment, Support, or Threat/Pressure

A. Rewards

A0. No rewards
A1. Symbolic reward
A2. Material reward
A3. Special privilege
A4. Teacher reward
A5. Other reward
A6. Contracts

Table 9 (cont'd.)

B. Punishments
- B0. No punishments
- B1. Loss of privilege
- B2. Punitive isolation
- B3. Extra time
- B4. Extra requirements
- B5. Restitution
- B6. Physical punishment
- B7. Other adult
- B8. Other punishment

C. Supportive Behaviors
- C0. No supportive behaviors
- C1. Specific behavioral praise
- C2. Global personal praise
- C3. Encouragement
- C4. Comfort/reassurance
- C5. Defending student
- C6. Kid gloves treatment
- C7. Supportive isolation
- C8. Involves peers
- C9. Involves parents
- C10. Involves other adults
- C11. Instruction
- C12. Modeling acceptance
- C13. Other support

D. Threatening/Pressuring Behaviors
- D0. No threatening/pressuring behaviors
- D1. Specific behavioral criticism
- D2. Global personal criticism
- D3. Sarcasm/ridicule
- D4. Diagnosing
- D5. Third degree
- D6. Involves peers
- D7. Involves parents
- D8. Involves other adults
- D9. Other threat/pressure

IV. Commonly Mentioned Strategies for Responding to Depicted Problem Behavior

A. Strategies for Solving Academic Problem
- A0. None
- A1. Help
- A2. Reduce/change task
- A3. Deal with affect
- A4. Involving parents
- A5. Diagnostic workups
- A6. Other

B. Problem-Solving Strategies (non academic)
- B0. None
- B1. No response/avoidance
- B2. Teacher delegates problem to other authority
- B3. Extinguish
- B4. Postpone
- B5. Management response
- B6. Tension release
- B7. Reward
- B8. Punishment
- B9. Removal or isolation
- B10. Prescribing/modeling
- B11. Proscribing
- B12. Change physical environment
- B13. Change social environment
- B14. Eliminate source of problem
- B15. Catharsis
- B16. Insight
- B17. Build self-concept
- B18. Relationship
- B19. Involves parents
- B20. Other

C. Teacher Gathers Information Before Taking Action

D. Elicits Student Input re: Solutions

E. Developing Student Insight
- E0. None
- E1. Recognize own behavior or its consequences
- E2. Causes of own behavior
- E3. Recognizes others' behavior
- E4. Causes of others' behavior
- E5. Student's feelings
- E6. Others' feelings
- E7. Teacher's goals/feelings
- E8. Other

F. Rationale/Justification for Demands
- F0. No demands
- F1. No rationales
- F2. Cites rules
- F3. Personal appeal
- F4. Moralize
- F5. Induce empathy
- F6. Logical analysis
- F7. Pride/self-concept
- F8. Safety
- F9. Other

vignette was part of a larger chronic pattern of similar behavior. If they treated the problem behavior depicted in the vignette as an isolated event, giving no hint of recognition that it was part of a chronic pattern, they were coded "0" for this category.

IC. Proactive vs. reactive vs. avoidant response. This is a general categorization of the level of concern and effort with which the teacher would respond to the depicted problem. Teachers who spoke of making an organized, programmatic attempt to deal with the larger problem, and not merely the incident depicted in the vignette, were coded C1 (proactive response). Teachers who confined their response to a brief reaction to the depicted behavior in the immediate situation were coded C2 (reactive response). Finally, teachers who would not deal with the problem at all were coded C3 (avoidant response).

ID. Goal of influence attempt. This was a general categorization of the teacher's approach to the problem student. Those who mentioned providing significant counseling or instruction to the student were coded D1 (improve mental hygiene or coping skills). Those who spoke of shaping desirable behavior (in addition to or instead of just reducing undesirable behavior) were coded D2 (shape through rewards). Finally, those who only concentrated on controlling undesirable behavior in the immediate situation were coded D3 (control through threat or punishment).

IB. Imperative (vs. instructive). This coding, taken from the literature on socialization in the home, considers the degree to which the teacher goes beyond imperatives (demands, commands, telling the student what to do) in order to be instructive (give information about the rationales underlying demands, or offer modeling and instruction about how the demands can be carried out). Teachers who included considerable instruction in their responses were coded B0 (highly or moderately instructive). Teachers who included at least some instruction along with imperatives were coded B1 (at least minimally

instructive). Finally, teachers whose responses were confined to imperatives were coded B2 (purely imperative). Taken together, these three codes constituted a scale, so that data aggregated across teachers include means (the sum of the 0's, 1's, and 2's, divided by the number of teachers coded) in addition to data on each of the individual categories (B0, B1, or B2).

IF. Inaccurate perception of problem student. In addition to responding to the vignettes, the teachers were asked to describe the depicted problem student in their own words, as they would describe that student to another teacher. These descriptions were coded for accuracy (given the content of the vignette). Teachers were coded F1 (accurate and precise), F2 (generally accurate but imprecise), or F3 (clearly inaccurate). Mean scores from these codes were also included in the data aggregated across teachers.

IG. Lack of congruence between perception and response. The teachers' responses to the vignettes were also coded for the degree of congruence between the perception of the problem student as stated by the teacher and the nature of the response to that student. Teachers were coded in Category G1 (integrated response) if there was a clear and congruent relationship between the strategy they adopted for responding to the student and the description of the student that they provided (student is described as rejected by peers because he lacks knowledge about how to initiate prosocial relationships; teacher's response involves coaching the student about initiating prosocial relationships). Teachers were coded in Category G2 (integrated but compatible) if their perception of the student and their response to the student were not well integrated but were at least compatible or not contradictory (teacher says that the student underachieves because he has no peer relationships outside of school and thus cannot resist socializing with peers when he should be working; teacher's response is to initiate a behavior contract system offering incentives for completed work). Finally, teachers were coded in Category G3 (contradictory

elements) if there was a direct contradiction between the student's needs as described in the perception statement and the response reported by the teacher (student is described as underachieving due to lack of self-esteem; teacher's response is to berate the student for being lazy). Mean scores for congruence were also computed in data aggregated across teachers.

Section II of the Universal system for vignettes focused on causal attributions and other aspects of the attributional thinking of teachers concerning the nature of the student's problem, their own role (if any) in its development, and their prospects for bringing about significant improvement. Coding categories were based on concepts introduced by attribution theorists (e.g. Weiner, 1979), particularly those who concern themselves with onlookers' thoughts about the causes of difficulties they observe in other people and about whether or not they should attempt to help those people (Carroll & Payne, 1977; Piliavin, Rodin, & Piliavin, 1969; Weiner, 1980).

IIA. Locus of causality. The first distinction concerns whether the cause of the problem lies within or outside of the problem student. Depending on what teachers stated or implied about this issue, their responses were coded in Category A1 (the cause of the problem is seen as internal to the student), A2 (the cause of the problem is seen as external to the student), A3 (the problem is seen as caused by an interaction of internal factors with external factors), or A4 (two or more of the previous possibilities are mentioned). For this (locus of causality) and all of the other attributional inference category sets, data on one of the subcategories (in this case A2: problem is seen as caused by factors external to the student) have been omitted from the tables because they are redundant with the remaining information. In this case, the correlations for Category A2 were nearly identical in magnitude to, but opposite in direction from, the correlations for Category A1.

IIB. Controllability. This coding concerned the teacher's beliefs about whether or not the student could control the problem behavior if he or she attempted to do so. Teachers who believed that the student could control the problem behavior and thus could be held responsible for its occurrence were coded in Category B1 (student responsible), teachers who believed that the student could not control the problem behavior were coded in Category B2 (student not responsible), and teachers who recognized both of these possibilities were coded in Category B3 (both possibilities).

IIC. Intentionality. This coding concerned the teacher's beliefs about whether or not the student was acting intentionally when displaying the problem behavior (intentionality presupposes controllability, but it is possible to believe that certain students are not misbehaving intentionally in a specific situation even though they are at least potentially capable of controlling their behavior). The teacher's responses were coded into Category C1 (student is seen as acting intentionally), C2 (student is seen as not acting intentionally), or C3 (both possibilities are recognized).

IID. Stability. This refers to the teacher's perceptions of the stability of the problem behavior. Teachers' responses were coded into Category D1 (problem is seen as stable over time), D2 (problem is seen as short lived or otherwise unstable), or D3 (both possibilities are mentioned).

IIE. Globality. This coding refers to the degree to which the teacher sees the problem behavior as generalized across situations rather than as confined to particular situations. Teachers' responses were coded into Category E1 (problem seen as generalized), E2 (problem seen as restricted to particular situations), or E3 (both possibilities are recognized).

The categories in Sections IIA-IIE above all refer to the teacher's beliefs about the problem behavior as it has developed and presently exists within the student. The following categories refer to the teachers' beliefs

about the teacher's role in contributing to the development or elimination of the problem.

IIF. Locus of causality. This coding refers to the teachers' beliefs about their own role in contributing to the problem. Teachers' responses were coded into Category F1 (the teacher is seen as the sole cause of the problem), F2 (the problem is seen as due to causes entirely external to the teacher), F3 (the problem is seen as arising from the interaction of causes internal to the teacher with causes external to the teacher), or F4 (two or more of the previous possibilities are recognized).

IIG. Controllability. This coding refers to the teachers' beliefs about whether or not they could effect change in the problem if they tried to do so. The teachers' responses were coded into Category G1 (the teacher can effect change), G2 (change is possible, but must be brought about through the efforts of someone other than the teacher), G3 (meaningful change is not possible), or G4 (two or more of the previous possibilities are recognized).

IIH. Stability. This coding refers to the degree to which the teacher expects improvement (if any) in the situation to remain stable over time. The teachers' responses were coded into Category H1 (expects stable improvements), H2 (expects only temporary improvements), or H3 (recognizes both possibilities).

II I. Globality. This coding refers to the degree to which the teacher expects improvements (if any) in the student's behavior to be generalized across situations. Teachers' responses were coded in Category I1 (expects generalized improvements), I2 (expects only localized or situationally bound improvements), or I3 (recognizes both possibilities).

Section III of the Universal system for vignettes covers teachers' attempts to manipulate student behavior through reward, punishment, support, or threatening or pressuring behavior.

IIIA. Rewards. Teachers who never mentioned offering rewards as part of their response to the vignettes were coded in Category A0 (no rewards). Teachers who did mention rewards were coded for the type of reward mentioned: A1 (symbolic reward--smiling faces, good papers hung on bulletin board), A2 (material reward--edibles, trinkets), A3 (special privileges--access to special equipment or activities, appointment as special monitor), A4 (teacher reward--special attention from or opportunity to spend time with the teacher), or A5 (other). In addition, if the teacher mentioned using performance contracts in connection with offering rewards as incentives to students, Category A6 (contracts) was coded.

IIIB. Punishments. Teachers who never mentioned threatening or using punishment were coded in Category B0 (no punishment). The other teachers were coded for the category of punishment they mentioned: B1 (loss of privilege), B2 (punitive isolation), B3 (extra time--staying after school or in some other way being required to spend extra time at school), B4 (extra requirements--penance-type punishments), B5 (restitution--replacing lost or stolen property, repairing or restoring damages done), B6 (physical punishment), B7 (sending the student to another adult--usually the principal or the parent--for punishment), or B8 (other).

IIIC. Supportive behaviors. This section refers to teacher behaviors intended to provide encouragement, reassurance, or support to the problem student. Teachers who never mentioned such supportive behaviors were coded in Category C0 (no supportive behavior). The remaining teachers were coded for the particular supportive behavior they mentioned: C1 (specific behavioral praise), C2 (global personal praise--praising the student as a "good boy" or "good girl" without referring to specific praiseworthy behaviors), C3 (encouragement--noting that things are getting better or that the student has the capacity to succeed in meeting goals if he or she puts forth the effort), C4

(comfort/reassurance--following failures or setbacks), C5 (defending the student--against taunts or pressures from peers), C6 (kid gloves treatment), C7 (supportive isolation--seating the student away from peers or in a special study carrel--done as an attempt to be helpful, not to punish), C8 (involves peers--to support the problem student), C9 (involves parents--to support the problem student), C10 (involves other adults--to support the problem student), C11 (instruction), C12 (modeling acceptance--deliberately modeling acceptance of the problem student, with the intention that the peer group will also begin to show such acceptance), or C13 (other).

IIID. Threatening/pressuring behaviors. This section was used for teacher behaviors that were intended to (or at least, that would be likely to) threaten or pressure the problem student into changing his or her behavior. Teachers who never mentioned such threatening or pressuring behaviors were coded in Category D0. The remaining teachers were coded for the particular threatening or pressuring behaviors they mentioned: D1 (specific behavioral criticism), D2 (global personal criticism), D3 (sarcasm or ridicule), D4 (diagnosing--in a manner that constituted criticism or attack on the student rather than an attempt to help or explain), D5 (third degree methods--grilling the student at length about his or her presumably blameworthy motives, intentions, and actions; using accusatory and redundant or rhetorical questions), D6 (involves peers--to threaten or pressure), D7 (involves parents--to threaten or pressure), D8 (involves other adults--to threaten or pressure), or D9 (other).

Section IV of the Universal system for coding vignette responses includes the more commonly mentioned strategies for dealing with various types of problem student. Many of the categories have been described already in discussing the Universal system for coding interviews.

IVA. Strategies for solving academic problems. These strategies applied most obviously to the vignettes dealing with low achieving students (Vignettes

12 and 24), although they frequently were mentioned as responses to underachieving, hyperactive, or distractible students, as well. Category A0 was used for teachers who did not mention strategies designed to solve academic problems. The strategies mentioned by the remaining teachers were coded into Category A1 (tutoring or providing some other form of help to the student), A2 (reducing the length or level of difficulty of the task, or otherwise changing the task to make it easier for the student), A3 (dealing with the student's anxiety, frustration, or other negative affect), A4 (involving the parents as tutors or helpers at home), A5 (referring the student for diagnostic workup by a school psychologist or other professional), or A6 (other).

IVB. Strategies designed to address nonacademic (personal or behavioral) problems. Teachers who did not mention any such strategies were coded in Category B0. The strategies mentioned by the other teachers were coded in Category B1 (attempting to avoid responding to the problem or making no response to it at all), B2 (delegating the problem to someone else to handle), B3 (attempting to extinguish by ignoring), B4 (postponing response until a later time), B5 (brief management response--behavioral directive or call for attention--rather than a more extensive attempt to deal with the problem), B6 (use of humor or other tension release comments), B7 (offer or delivery of reward), B8 (threat or delivery of punishment), B9 (time out or physical isolation), B10 (prescribing or modeling desirable behavior), B11 (stating proscriptions or limits), B12 (changing the physical environment), B13 (changing the social environment), B14 (attempt to identify and eliminate the source of the student's problem), B15 (suggest that the student engage in activities believed to allow catharsis of pent up emotions), B16 (provide counseling designed to develop insight), B17 (attempt to encourage or build a more positive self-concept), B18 (attempt to develop and work within a close personal relationship with the problem

student), B19 (attempt to involve parents in helping or providing support to the problem student), or B20 (other).

IVC. Gather more information before taking action. Teachers who stated that they would first talk to the student, consult records or other individuals, or in some other way get more information before taking action in response to the situation depicted in the vignette were coded "1" on this variable. The other teachers were coded "0."

IVD. Student input. Teachers who sought input from the student before deciding how to handle the situation were coded "1" for this variable, and teachers who did not were coded "0."

IVE. Teacher attempts to develop insight. Teachers who did not mention attempting to develop insight were coded in Category E0. The strategies mentioned by the remaining teachers were coded in Category E1 (trying to get the problem student to recognize his or her own behavior), E2 (trying to get the problem student to see the causes of his or her own behavior), E3 (trying to get the problem student to recognize others' behavior for what it is, or to stop misinterpreting it), E4 (trying to get the problem student to understand why others behave as they do), E5 (trying to get the problem student to become more aware of his or her feelings), E6 (trying to get the problem student to become more aware of peers' feelings), E7 (trying to get the problem student to become more aware of the teacher's goals or feelings), or E8 (other).

IVF. Rationales. These categories were used to code the justifications teachers put forward in attempting to explain the bases underlying their demands. Teachers who mentioned no demands were coded F0 (no demands), and teachers who mentioned demands but did not report communicating rationales in connection with these demands were coded F1 (no rationales). The remaining teachers, who did give rationales or attempt to justify their demands, were coded in Categories F2 (justifying demands by citing school or classroom rules), F3 (making

a personal appeal--"please do it for me"), F4 (moralizing, appealing to norms or guidelines about right and wrong--"Good boys don't do that"), F5 (appealing to the Golden Rule or trying to induce empathy for the victim in order to make the problem student realize why particular behavior is unjust or inappropriate--"How would you feel if someone did that to you?"), F6 (logical analysis or appeal to reason, geared to show the problem student that particular behavior is self-defeating), F7 (attempt to appeal to the problem student's personal pride or positive self concept--"I know that you are not the type of person who would do that again if you could help it"), F8 (appeal to safety concerns in justifying prohibitions), or F9 (other).

In addition to the data on these individual categories, various sum and proportion scores were computed to measure teachers' relative emphasis on different approaches to coping with the situations depicted in the vignettes (academic help, minimal management or control responses, behavior modification strategies, counseling or development of insight, appeal to logic or reason).

These data are discussed in the following sections of this report, first for general trends in the sample of teachers treated as a whole and then for comparison of subsamples differing in role definitions (instructors vs. socializers), location (Big City vs. Small City), grade level (K-3 vs. 4-6), and gender (male teachers vs. female teachers).

General Trends in the Teachers' Responses

General trends and patterns in the data from the two universal coding systems aggregated across problem student types are shown in Tables 10 and 11. These data indicate the frequency with which each category was coded and the degree to which category use fluctuated across problem student types.

Table 10

Teachers' Responses to the General Strategies Interview Categorized According to the Universal Coding System[a]

Coding Categories	Failure Syndrome	Perfectionist	Underachiever	Hostile-Aggressive	Passive-Aggressive	Defiant	Hyperactive	Distractible	Immature	Rejected by peers	Shy/withdrawn	Mean
A. Problem-Solving Strategies												
0. Not a problem	0	0	2	0	2	2	1	1	0	4	12	2
1. Nothing can be done	1	0	2	0	2	1	2	0	5	2	9	2
2. Delegate to other authority	1	0	0	2	0	2	0	2	4	2	1	1
3. Extinguish/ignore	2	3	1	13	42	25	9	3	22	1	0	11
4. Minimal intervention/redirect	4	3	7	14	21	12	33	32	8	1	5	13
5. Humor/tension release	0	3	1	1	0	3	2	2	1	0	1	1
6. Minimize stress/embarrassment	5	9	1	8	2	2	5	4	4	10	33	8
7. Inhibit through physical proximity/voice control/eye contact	0	0	2	19	19	33	30	12	2	1	0	11
8. Support through physical proximity/voice control/eye contact	15	8	1	8	6	7	8	13	13	3	18	9
9. Time out: extinction/removal	0	0	3	29	17	29	10	3	1	1	0	8
10. Time out: calm down, reflect	0	1	2	20	5	14	7	3	5	0	0	5
11. Diagnosing	0	0	0	0	0	0	0	0	0	0	0	0
12. Criticize	1	0	0	6	3	6	1	2	9	0	1	3

Table 10 (cont'd.)

Coding Categories	Failure Syndrome	Perfectionist	Underachiever	Hostile-Aggressive	Passive-Aggressive	Defiant	Hyperactive	Distractible	Immature	Rejected by peers	Shy/withdrawn	Mean
13. Threaten/punish	6	6	26	49	46	61	18	19	14	0	1	22
14. Prescribing: limits, rules, expectations	7	30	25	52	57	59	33	30	43	10	4	32
15. Appeal/persuade	9	50	27	16	18	14	13	5	12	4	4	16
16. Contracts/commitment to goals	5	6	7	11	4	2	1	1	3	0	0	4
17. Prescribing/telling/instructing/eliciting	13	41	13	42	14	20	25	14	42	29	13	24
18. Direct modeling	1	15	5	6	3	0	3	0	8	2	0	4
19. Indirect modeling	1	25	4	6	1	6	5	3	4	23	4	7
20. Praise	52	31	15	19	22	15	14	19	26	4	26	22
21. Reward	35	14	49	28	11	18	31	21	9	1	11	21
22. Encouragement/positive expectations	37	12	13	6	2	5	1	7	22	2	19	10
23. Comfort/reassurance	4	15	0	3	0	2	2	1	7	7	2	4
24. Kid gloves	7	15	1	7	7	3	4	1	4	0	13	6
25. Eliminate source of problem	3	4	21	15	9	9	42	32	7	34	0	16
26. Counseling/producing insight	1	5	1	17	5	2	5	0	0	16	1	5
27. Build self-concept	67	26	19	8	7	11	2	6	22	18	29	20

Table 10 (cont'd.)

Coding Categories	Failure Syndrome	Perfectionist	Underachiever	Hostile-Aggressive	Passive-Aggressive	Defiant	Hyperactive	Distractible	Immature	Rejected by peers	Shy/withdrawn	Mean
28. Relationship	3	2	8	12	15	5	2	1	5	2	20	7
29. Change task	56	10	35	4	4	2	25	44	10	0	4	18
30. Change physical environment/isolation	0	2	1	18	2	1	20	31	0	0	0	7
31. Change social environment	13	10	9	7	11	4	4	7	10	59	44	16
32. Group work	6	11	1	21	7	6	10	2	9	57	9	13
33. Involves peers for support	10	1	8	7	3	6	7	10	15	30	10	10
34. Involves peers to pressure/punish	1	0	4	9	14	8	4	3	4	2	1	5
35. Involves parents for support or problem solving	20	19	23	26	19	15	23	10	25	20	11	19
36. Involves parents to pressure/punish	1	0	11	15	9	27	1	1	2	0	1	6
37. Involves school-based authority figures or professionals to support or problem solve	20	10	9	30	13	25	16	9	8	20	23	17
38. Involves school-based authority figures or professionals to pressure or punish	0	0	1	12	6	28	2	0	0	0	0	4
39. Involves outside medical or mental health professionals	1	1	1	2	1	6	19	4	1	1	1	3
40. Work with/counsel parents	2	4	6	4	0	1	0	1	4	3	2	2

Table 10 (cont'd.)

Coding Categories	Failure Syndrome	Perfectionist	Underachiever	Hostile-Aggressive	Passive-Aggressive	Defiant	Hyperactive	Distractible	Immature	Rejected by peers	Shy/withdrawn	Mean
41. Academic help	59	15	18	0	6	6	4	33	18	1	5	15
C. General Problem-Solving Approach												
1. Control/suppress undesirable behavior	8	10	25	38	46	59	24	20	19	13	1	24
2. Shape desirable behavior	38	5	19	15	5	5	24	29	11	2	31	17
3. Solve problem: instruction/training/modeling/help	4	20	3	16	7	10	2	13	49	22	71	20
4. Help student cope with problem	0	0	0	25	5	11	45	9	8	3	0	10
5. Identify and treat (external) causes	3	7	18	12	12	13	37	40	12	51	1	19
6. Insight	0	3	0	9	5	2	3	0	0	10	1	3
7. Appeal/persuade/change attitudes	6	56	28	9	18	15	5	4	9	1	9	15
8. Encourage/reassure/build self-concept/provide supportive environment	78	32	20	26	13	8	3	10	29	16	48	26
D1. Teacher Mentions Using Long-term Prevention/Cure Strategies	80	75	56	57	62	59	72	79	79	69	85	70

Table 10 (cont'd.)

Coding Categories	Failure Syndrome	Perfectionist	Underachiever	Hostile-Aggressive	Passive-Aggressive	Defiant	Hyperactive	Distractible	Immature	Rejected by peers	Shy/withdrawn	Mean
G. Differentiated Strategies for Different Subtypes												
0. No subtypes	58	68	67	65	63	56	56	52	49	48	50	57
1. No linkages of strategies to subtypes	14	9	11	8	11	10	12	15	13	15	10	12
2. Links strategies to subtypes	22	17	15	22	20	29	26	27	32	30	31	25
H. Problem Ownership												
0. None	90	89	76	91	84	89	87	87	94	91	86	88
1. Partial	4	5	13	4	10	6	7	7	0	2	5	6
2. Full responsibility	0	0	2	0	0	0	0	0	0	0	0	0
I. Teacher's Motivation												
1. Survival/concern about self	2	0	7	10	31	61	5	1	1	0	2	11
2. Instructional concerns	84	46	46	20	20	23	44	62	10	3	14	34
3. Group functioning and safety	2	0	3	51	47	48	53	10	30	63	15	29
4. Concern about problem student	55	71	35	38	24	30	19	50	63	60	79	48
5. Prepare individual for better future life	4	8	24	10	3	7	3	4	6	4	8	7
6. Society's needs	0	0	2	0	2	1	0	0	1	1	3	1

Table 10 (cont'd.)

Coding Categories	Failure Syndrome	Perfectionist	Underachiever	Hostile-Aggressive	Passive-Aggressive	Defiant	Hyperactive	Distractible	Immature	Rejected by peers	Shy/withdrawn	Mean
7. Promote morality	0	0	0	1	0	0	1	0	1	4	0	1
8. Upholding school rules	0	0	0	9	2	9	1	0	0	0	0	2
9. Personal irritation/anger	0	2	5	9	14	22	15	1	17	0	2	8
10. Other	0	0	0	0	0	0	0	0	0	0	0	0
K. Punishment												
0. None	88	88	66	46	48	34	76	75	80	0	90	63
1. Immediate	0	0	12	25	21	37	3	7	8	0	1	10
2. Backup	2	4	11	22	21	23	11	12	6	0	0	10
3. Last resort	4	2	4	2	4	1	4	0	0	0	0	2

[a] No data are included for problem student type No 4 (low achiever) because the Universal coding system does not apply to this type. The numbers are the numbers of teachers whose responses to the interview concerning the problem student type were coded into corresponding coding categories.

Universal Coding System for Interviews

Table 10 presents summary data from the Universal coding system for the general strategies interviews. The first 11 columns show the numbers of teachers whose interview responses for the problem student type listed at the top of the column were coded for the category described at the left side of the row (there are 11 of these columns rather than 12 because interviews concerning low achieving students were not coded with the Universal system). The last column in the table presents the means computed from the first 11 columns.

The means for the first two sections in the table indicate considerable variation in reported strategy use, which was expected given the variation in types of problem behavior addressed. None of the general problem-solving approach categories (Section C) or the more specific problem solving strategy categories (Section A) yielded a mean higher than 32, or about one-third of the total sample of teachers. However, as many as two-thirds of the teachers reported using particular strategies for particular types of problem student.

The most common general approaches were attempts to encourage, reassure, build self-concept, or provide a supportive environment to the problem student (mentioned by an average of 26 teachers per interview) and attempts to control or suppress undesirable behavior (mean = 24). Other frequently mentioned approaches included attempting to solve the problem through instruction, training, modeling, or help (20), attempting to identify and treat external causes (19), attempting to shape desirable behavior through reinforcement (17), and attempting to appeal, persuade, or change attitudes (15). Attempts to help the student cope with the problem were mentioned less frequently (10), and attempts to develop the student's insight into the problem were mentioned least often (3). Thus, relatively brief interventions involving talking to the student about the problem or attempting to manipulate the student's behavior through reward or punishment were reported most frequently even in these interviews

designed to get at general strategies (not just situational responses to particular behavior), and attempts to implement the advice of experts were relatively infrequent. Individualized counseling designed to develop insight in the student was especially infrequent.

Similar trends can be seen in the means for reporting of specific strategies. Proscribing undesirable behavior by stating limits, rules, and expectations was the most frequent strategy mentioned (32), followed by prescribing desirable behavior through telling, instructing, or eliciting (24), threat or punishment (22), praise (22), reward (21), attempts to build self-concept (20), involving parents to provide support or help solve the problem (19), changing the student's task (18), involving school authorities to provide support or help solve the problem (17), attempts to appeal or persuade (16), attempts to eliminate the perceived source of the problem (16), changing the student's social environment (16), and providing academic help (15). Among the least frequently reported strategies were denying that a problem existed (2), declaring that nothing could be done (2), attempting to delegate the problem to an authority figure without dealing with it personally (1), verbally criticizing or blaming the student (3), using behavior contracts (4), providing prescriptive instruction that included modeling (4), providing comfort or reassurance to the student (4), counseling in an attempt to improve insight (5), attempting to involve peers (5), the parents (6), or school authority figures (4) to bring pressure on or punish the problem student, involving outside medical or mental health professionals (3), and attempting to work with or counsel the parents (2).

These general trends in the teachers' responses are similar to those reported by other investigators (Barnes, 1963; DeFlaminis, 1976; Elliott, Witt, Glavin, & Peterson, 1984; Natriello & Dornbusch, 1984; Prawat, 1980; Reimer, Wacker, & Koeppl, 1987; Witt & Robbins, 1985; Wragg, 1985). That is, they

suggest that teachers tend to rely on brief verbal responses that they can make on the spot (possibly backed by an individualized conference with the student later) rather than on responses that are more time consuming, and that they generally use methods that are neutral or positive/supportive rather than methods that are negative/punitive. Also, teachers' responses to problem students tend to be based on common sense and personal experience rather than on expert advice or well-articulated theories of diagnosis and intervention (Barnes, 1963; Bush, 1985; DeFlaminis, 1976).

For many of the strategies, the central tendencies represented by the means shown in Table 10 may be less meaningful than patterns of variation observed across types of problem student. For example, the most frequently reported general approach (encourage/reassure/build self-concept/provide supportive environment) was mentioned often in interviews concerning failure syndrome, perfectionist, and shy/withdrawn students, but seldom in connection with passive-aggressive or defiant students. In contrast, the second most frequently reported general approach (control/suppress undesirable behavior) had precisely the opposite pattern. Also, attempts to solve the problem through instruction, training, modeling, or help were mentioned frequently only in connection with immature and shy/withdrawn students; attempts to help the student cope with the problem were mentioned frequently only in connection with hyperactive students; attempts to identify and treat perceived external causes only with hyperactive, distractible, and rejected students; and attempts to appeal, persuade, or change attitudes only with perfectionist students.

Similarly noteworthy variation is seen in the data in Section A on specific problem-solving strategies. Unusually high frequencies for mention of a particular problem solving strategy in response to a particular problem student type were as follows:

--Shy/withdrawn students: Denial that a problem exists, statements that nothing can be done, attempts to minimize stress or embarrassment, attempts to provide support through proximity, voice control, or eye contact, kid gloves treatment, attempts to build and use a personal relationship with the student, attempts to change the student's social environment.

--Passive aggressive students: Attempts to extinguish or ignore undesirable behavior, attempts to get peers to pressure or punish the problem student.

--Hyperactive students: Minimal intervention/redirect; attempts to inhibit through proximity, voice control, or eye contact; attempts to eliminate the perceived external source of the problem; changing the physical environment or isolating the student; involving medical experts.

--Distractible students: Minimal intervention/redirect, attempting to eliminate the perceived external source of the problem; changing the student's task; changing the physical environment or isolating the student; providing academic help.

--Defiant students: attempts to inhibit through physical proximity, voice control, or eye contact; time out intended to extinguish the behavior or simply to remove the student from the situation; threats and punishment; involvement of parents or authority figures in an attempt to pressure or punish the student.

--Hostile-aggressive students: time out intended to allow the student an opportunity to calm down, behavior contracts, counseling intended to produce insight, group work, involving parents or school authority figures in an attempt to provide support or get help in solving the problem.

--Immature students: personal criticism and blame, attempts to encourage or provide positive expectations.

--Perfectionist students: Appeal/persuade, direct modeling, indirect modeling, attempts to provide comfort or reassurance, kid gloves treatment.

--Failure syndrome students: attempts to provide support through physical proximity, voice control or eye contact, praise, encouragement and positive expectations, attempts to build self-concept, changing the student's task, providing academic help.

--Underachievers due to alienation: rewards, contracts.

--Students rejected by their peers: indirect modeling, attempts to eliminate the perceived external source of the problem, counseling intended to produce insight, changing the student's social environment, group work, involving peers to provide support or help solve the problem.

Some of these linkages between particular strategies and particular types of problem student seem logically necessary (group work and peer support for students rejected by their peers), and most of the rest make common sense (persuasion for the perfectionist, ignoring provocations by passive-aggressive students). However, there are exceptions. Why should more criticism be directed to immature students than to alienated underachievers? Why should teachers be more likely to stress building a good relationship with passive-aggressive students than with defiant students? Why aren't contracts mentioned more often in connection with hyperactive or distractible students? These questions call attention to the fact that patterns of variation across problem student types do not always conform to expert advice or even to what appear to be logically necessary relationships between the nature of the problem behavior and the nature of the appropriate problem solving strategies. More will be said about this following presentation of the data in Tables 10 and 11.

Section D in Table 10 indicates that teachers mentioned using long-term preventive or cure strategies 70% of the time, being most likely to do so for shy/withdrawn students and least likely for alienated underachievers and hostile-aggressive students. Section G indicates that an average of 57 teachers did not distinguish among subtypes when talking about a particular type of problem student. An average of 37 teachers did distinguish subtypes, and of these, an average of 25 teachers mentioned different strategies that would be used in connection with the different subtypes. Differentiated strategies for different subtypes of problem student were mentioned most often for students described as immature, shy/withdrawn, or rejected by their peers. Such differentiation was least likely with perfectionists and alienated underachievers. (Note: For simplicity, alienated underachievers will be referred to simply as "underachievers" throughout the rest of this report).

Section H indicates that teachers rarely saw themselves as contributing to the depicted problems. Two teachers suggested that they might be fully responsible for underachievement (due to failure to match difficulty level of curriculum to the student's current abilities), and small minorities (up to about 15%) of the teachers suggested that they might bear partial responsibility for other problem types (except for immaturity, for which no teacher would accept even partial responsibility). The teachers' general tendency to deny even partial responsibility for the depicted problems may seem unreasonably defensive, but it is justified given the descriptions of the problem student types that we prepared for the teachers to respond to in these interviews. Recall that these descriptions depicted severe and stable problems that had developed before the students entered the teacher's classroom, presumably due to factors in the home situations, prior classroom experiences, or the students themselves. Thus, the data in Section H of Table 10 should be taken as indicative of accurate reading of our problem student descriptions by the teachers, not defensive denial or lack of professionalism in their interview responses.

The data in Section I indicate that personal concern about the welfare of the problem student was the most frequently coded motive driving the teachers' response (48), followed by instructional concerns (34) and concerns about group functioning or safety (29). The remaining motives were mentioned much less frequently, although survival concerns were especially likely to be mentioned in connection with defiant and passive-aggressive students, concern about preparing the student for a better future life in connection with underachieving students, and personal irritation or anger in connection with defiant, immature, passive-aggressive, and hyperactive students.

Finally, the data in Section K indicate that teachers usually did not even mention punishment in their interview responses, and that when they did, punishment was often mentioned as a backup or last resort measure rather than as an

immediate response to problem behavior. Punishment was likely to be mentioned with hostile-aggressive, passive-aggressive, and (especially) defiant students, but unlikely to be mentioned with the other problem student types.

Universal Coding System for Vignettes

Table 11 presents summary data from the Universal coding system for the vignettes. The first 24 columns in the table present data for each of the vignettes individually, and the last column presents the mean. There were two vignettes for each of the 12 problem student types, described in Table 2, and data for these paired vignettes are presented in adjoining columns in the table (thus, Vignettes 1 and 13 were failure syndrome vignettes, Vignettes 5 and 17 were perfectionist vignettes, etc.).

Section I of the table presents information about general characteristics of the teachers' responses to the vignettes. These data indicate that the vast majority of the teachers recognized that the problem behavior depicted in the vignettes was part of a chronic pattern and not an isolated event (mean for Category IA1 = 90), and that when asked to describe the problem students in their own words, gave descriptions that tended to be either accurate and precise or at least generally accurate if somewhat imprecise (mean for Category IF = 1.47). Furthermore, there usually was appropriate congruence between the teachers' perceptions of the causes of a problem and the nature of the strategies they suggested for responding to it. Even when the problem diagnosis and the response strategy were not well integrated, they tended to be compatible rather than contradictory (mean for Category IG = 1.19). In general, then, the teachers' perceptions of the depicted problem students included the key elements that we had tried to communicate in constructing the vignettes, and the relationships between the perceived problems and the teachers' suggested solutions were usually logical or at least not contradictory.

Table 11

Teachers' Responses to the Vignettes
Categorized According to the Universal Coding System[a]

Coding Categories	Failure Syndrome 1	13	Perfectionist 5	17	Under Achiever 9	21	Low Achiever 12	24	Hostile Aggressive 2	14	Passive Aggressive 6	18	Defiant 10	22	Hyperactive 3	15	Distractible 7	19	Immature 11	23	Rejected by peers 4	16	Shy/ withdrawn 8	20	Mean
I. General Response to the Vignette																									
A1. Depicted problem is understood to be part of a chronic pattern (not an isolated event)	95	91	95	95	93	94	96	94	91	86	80	81	82	72	91	87	91	94	91	94	91	93	95	87	90
C. Proactive vs. reactive vs. avoidant response																									
1. Proactive response (organized, programmatic)	97	96	92	92	90	95	93	96	91	92	84	87	92	89	91	80	88	94	91	89	93	93	84	85	91
2. Reactive response (reacts only briefly to the immediate problem)	0	1	4	3	6	2	4	0	6	5	13	9	5	7	6	14	9	2	5	6	3	3	1	9	5
3. Avoidant response (does not deal with the problem at all)	1	0	0	2	1	0	0	0	0	0	1	0	0	0	0	2	1	0	0	0	1	0	2	2	1
D. Goal of influence attempt																									
1. Improve mental hygiene or coping skills	58	43	37	63	14	23	90	90	42	35	12	7	15	2	40	35	28	32	28	37	64	58	46	31	39
2. Shape through rewards	59	65	47	32	47	28	9	15	5	13	6	20	4	3	23	27	46	66	5	20	24	40	54	53	30
3. Control through threat or punishment	7	18	30	6	71	75	3	2	78	72	86	81	94	97	69	67	19	29	74	50	24	22	9	23	47
Scores on Scaled Variables																									
B. Imperative vs. instructive, (0-highly or moderately instructive; 1-at least minimally instructive; 2-purely imperative)	1.05	1.24	1.42	.96	1.56	1.39	.92	.93	1.07	1.29	1.56	1.76	1.63	1.84	1.30	1.42	1.22	1.38	1.70	1.48	.80	1.07	.55	1.04	1.28

Table 11 (cont'd.)

Coding Categories	Failure Syndrome 1	13	Perfectionist 5	17	Under Achiever 9	21	Low Achiever 12	24	Hostile Aggressive 2	14	Passive Aggressive 6	18	Defiant 10	22	Hyper-Active 3	15	Distractible 7	19	Immature 11	23	Rejected by peers 4	16	Shy/ withdrawn 8	20	Mean
F. Inaccurate perception of problem student (1 = accurate and precise, 2= generally accurate but imprecise, 3= inaccurate)	1.76	1.80	1.33	1.49	1.75	1.63	1.14	1.17	1.05	1.36	1.77	2.02	1.43	1.24	1.28	1.84	1.50	1.41	1.11	1.21	1.24	1.54	1.17	1.95	1.47
G. Lack of congruence between perception and response (1=integrated response, 2=not integrated but compatible, 3=contradictory elements).	1.11	1.04	1.32	1.14	1.22	1.17	1.16	1.05	1.13	1.11	1.22	1.03	1.04	1.04	1.30	1.26	1.35	1.18	1.58	1.30	1.32	1.17	1.20	1.2	1.19
II. Attributional inferences																									
Teachers' perceptions about the student.																									
A1. Locus of causality: internal to student	58	86	78	73	65	85	88	72	58	68	74	90	74	87	83	79	64	78	80	66	42	59	66	74	73
A3. Locus of causality: internal-external interaction	2	0	0	0	0	1	4	6	4	8	4	0	4	0	2	4	4	1	4	4	1	5	5	0	3
A4. Locus of causality: multiple possibilities	18	4	6	10	13	2	5	12	7	7	8	1	9	3	10	9	20	13	6	9	25	20	17	18	11
B1. Controllability: student responsible	22	39	41	3	83	70	4	2	77	66	77	62	92	94	54	31	40	22	82	40	16	4	11	21	44
B3. Controllability: both possibilities	10	5	3	0	6	5	3	1	4	7	7	10	2	1	7	12	15	6	1	7	19	8	5	7	6
C1. Intentionality: student acts intentionally	23	17	12	2	80	19	0	1	80	74	66	43	91	92	5	22	6	5	76	12	3	3	7	6	31
C3. Intentionality: both possibilities	8	7	2	1	8	1	1	4	11	6	18	13	3	3	8	8	14	3	2	12	10	5	7	1	7
D1. Stability: problem is stable over time	90	89	94	92	91	95	93	90	88	88	70	72	83	81	86	92	81	82	91	91	87	89	92	66	86

Table 11 (cont'd.)

Coding Categories	Failure Syndrome 1	13	Perfectionist 5	17	Under Achiever 9	21	Low Achiever 12	24	Hostile Aggressive 2	14	Passive Aggressive 6	18	Defiant 10	22	Hyper-Active 3	15	Distructible 7	19	Immature 11	23	Rejected by peers 4	16	Shy/ withdrawn 8	20	Mean
D3. Stability: both possibilities	5	1	2	3	3	1	2	5	5	2	10	11	8	5	2	2	13	10	3	3	3	4	4	16	5
E1. Globality: problem is generalized	83	86	89	90	80	88	84	87	76	72	63	71	86	86	85	91	77	81	90	84	81	86	72	68	82
E3. Globality: both possibilities	7	3	5	3	11	3	11	6	12	12	16	13	4	1	4	2	17	11	4	9	8	4	16	20	8
Teachers' perceptions About Themselves																									
F2. Locus of causality: problem external to teacher	93	95	89	93	82	96	77	77	94	91	95	94	81	87	91	92	87	90	96	95	96	90	87	88	90
F3. Locus of causality: teacher-student interaction	0	0	0	0	1	0	9	8	2	1	0	0	1	0	3	3	2	1	0	1	0	0	0	1	1
F4. Locus of causality: multiple possibilities	4	2	8	4	12	2	11	10	0	4	2	4	15	12	3	1	8	6	1	2	1	6	9	9	6
G1. Controllability: teacher can effect change	86	80	84	85	61	76	46	48	34	52	89	80	46	41	67	66	78	76	86	69	72	51	74	78	68
G3. Controllability: meaningful change not possible	1	0	7	1	3	0	4	4	2	2	2	2	0	1	13	5	3	1	4	1	7	13	4	2	3
G4. Controllability: multiple possibilities	11	18	5	11	31	22	42	44	50	30	4	14	45	51	15	22	16	20	5	25	28	22	16	16	23
H1. Stability: expects stable improvements	78	77	65	82	49	70	43	75	49	41	43	55	64	58	41	31	37	58	69	69	57	46	63	52	57
H3. Stability: both possibilities	5	0	2	1	3	4	4	12	2	8	4	4	4	3	3	9	6	4	4	2	2	6	5	4	4
I1. Globality: expects generalized improvements	70	50	51	75	37	36	40	63	54	43	13	20	32	15	25	34	25	33	34	41	54	47	49	42	41
I3. Globality: both possibilities	3	0	1	0	0	0	1	2	0	4	0	3	3	1	3	4	5	1	0	2	3	1	3	1	2

Table 11 (cont'd.)

Coding Categories	Failure Syndrome 1 13	Perfectionist 5 17	Under Achiever 9 21	Low Achiever 12 24	Hostile Aggressive 2 14	Passive Aggressive 6 18	Defiant 10 22	Hyper-Active 3 15	Distractible 7 19	Immature 11 23	Rejected by peers 4 16	Shy/ Withdrawn 8 20	Mean
III. Attempts to manipulate student behavior through rewards, punishment, support, or threat/ pressure													
A. Rewards													
A0. No rewards	75 91	91 94	71 93	93 93	96 90	95 93	96 98	88 85	93 87	90 94	94 89	71 96	90
A1. Symbolic reward	11 2	5 0	12 1	1 4	0 3	1 0	0 0	4 3	1 4	0 0	0 1	4 0	2
A2. Material reward	5 1	0 0	5 0	0 1	1 2	0 0	1 0	4 1	0 4	0 1	0 2	0 1	1
A3. Special privilege	9 4	2 0	12 3	0 1	0 2	2 5	0 0	3 6	2 6	0 1	3 5	14 2	3
A4. Teacher reward	2 0	0 2	0 0	0 0	0 0	1 0	1 0	2 1	1 0	0 1	0 1	8 0	1
A5. Other	0 0	0 2	4 0	1 0	0 1	0 0	0 0	0 1	0 0	0 0	0 0	3 0	1
A6. Contracts	5 1	1 0	9 0	0 0	0 1	0 0	0 0	1 2	0 2	0 0	0 0	0 0	1
B. Punishments													
B0. No punishment	92 90	89 98	36 39	96 95	21 39	68 59	4 13	29 52	85 77	90 90	95 94	90 91	68
B1. Loss of privilege	4 4	4 0	25 6	1 0	4 10	6 14	46 0	4 3	3 12	1 1	0 1	1 1	6
B2. Punitive isolation	0 0	0 0	6 42	0 1	8 25	15 5	17 15	17 28	2 4	0 1	0 0	0 2	8
B3. Extra time	2 2	0 0	16 7	0 1	0 2	7 6	20 3	1 1	4 6	1 0	0 0	0 1	3
B4. Extra requirements	0 0	1 0	4 3	0 0	1 3	3 3	2 0	1 3	4 0	3 0	0 0	0 1	1
B5. Restitution	0 0	1 0	0 1	0 0	23 3	1 0	2 1	54 3	0 0	0 1	0 2	0 0	4
B6. Physical punishment	0 0	0 0	2 2	0 0	3 7	0 2	10 8	1 1	0 0	1 0	1 0	0 2	2
B7. Other adult	0 1	0 0	21 13	0 1	57 27	8 8	63 61	5 14	2 3	3 2	0 0	0 3	12
B8. Other	1 1	2 0	19 13	0 0	15 10	7 16	21 39	5 12	2 5	0 4	1 0	0 1	7

Table 11 (cont'd.)

Coding Categories	Failure Syndrome 1	13	Perfectionist 5	17	Under Achiever 9	21	Low Achiever 12	24	Hostile Aggressive 2	14	Passive Aggressive 6	18	Defiant 10	22	Hyper-Active 3	15	Distractible 7	19	Immature 11	23	Rejected by peers 4	16	Shy/ withdrawn 8	20	Mean
C. Supportive Behaviors																									
C0. No supportive behavior	4	10	7	1	49	49	4	1	36	42	45	59	69	77	31	33	27	21	37	16	1	2	0	19	27
C1. Specific behavioral praise	18	12	24	11	7	8	5	7	1	2	1	3	2	0	2	1	7	6	0	0	3	2	21	5	6
C2. Global personal praise	7	3	2	2	0	0	1	1	0	0	0	1	0	0	0	1	0	0	0	0	2	4	9	0	1
C3. Encouragement	51	38	36	26	5	3	7	20	0	0	0	1	3	0	1	0	2	5	1	1	4	2	23	5	10
C4. Comfort/reassurance	4	3	19	56	0	0	8	5	0	0	1	0	0	0	2	0	0	0	0	5	6	7	3	0	5
C5. Defending student	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	17	31	0	1	2
C6. Kid gloves treatment	2	12	19	44	9	7	27	17	13	14	35	18	2	2	28	16	23	13	23	8	10	8	45	33	18
C7. Supportive isolation	3	0	0	2	1	11	0	1	6	11	1	1	3	1	13	12	6	21	0	1	0	2	1	4	4
C8. Involves peers	13	12	4	11	2	8	31	24	11	4	6	3	1	0	7	3	7	6	10	38	74	79	16	7	16
C9. Involves parents	8	3	2	6	13	4	15	2	16	6	4	1	5	2	6	8	6	7	1	11	2	5	11	9	6
C10. Involves other adults	7	3	2	5	3	2	27	17	16	7	1	1	5	0	6	14	8	9	0	2	3	3	6	12	7
C11. Instruction	75	68	54	37	14	22	61	74	32	23	8	8	14	14	20	19	20	33	37	51	53	45	30	22	35
C12. Modeling acceptance	4	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33	15	1	0	2
C13. Other	15	11	15	17	10	11	16	16	10	13	8	9	5	4	21	26	30	19	2	14	16	23	30	33	16
D. Threatening/Pressuring Behaviors																									
D0. No threatening/pressuring behaviors	95	90	95	98	69	63	96	96	75	69	65	63	64	61	83	61	72	83	63	76	0	90	96	83	75
D1. Specific behavioral criticism	0	1	2	0	14	18	0	0	13	11	12	9	8	10	8	22	14	6	27	12	0	4	1	22	9
D2. Global personal criticism	1	3	0	0	3	7	0	0	4	10	9	9	10	7	4	8	2	3	6	4	0	2	0	1	4
D3. Sarcasm/ridicule	1	1	0	0	4	9	0	0	1	3	4	3	2	0	0	5	8	3	3	4	0	2	0	8	3

Table 11 (cont'd.)

Coding Categories	Failure Syndrome 1	13	Perfectionist 5	17	Under Achiever 9	21	Low Achiever 12	24	Hostile Aggressive 2	14	Passive Aggressive 6	18	Defiant 10	22	Hyper-Active 3	15	Distractible 7	19	Immature 11	23	Rejected by peers 4	16	Shy/ withdrawn 8	20	Mean
D4. "Diagnosing"	0	0	0	0	1	4	0	0	2	2	5	4	0	2	0	1	0	0	0	2	0	0	0	0	1
D5. Third degree	0	1	0	0	0	0	0	0	3	6	1	1	0	0	1	1	4	0	0	1	0	1	0	0	1
D6. Involves peers	0	0	0	0	1	4	0	0	3	0	2	8	0	3	1	2	0	0	1	0	0	0	0	0	1
D7. Involves parents	1	0	0	0	2	0	0	0	5	3	0	0	13	8	1	2	0	1	0	0	0	0	0	0	2
D8. Involves other adults	0	0	0	0	0	2	0	0	3	1	0	1	4	6	0	3	0	0	0	0	0	0	0	0	1
D9. Other	1	1	0	0	12	9	1	0	4	9	10	8	13	16	3	5	3	2	1	3	0	0	0	0	4
IV. Commonly Mentioned Strategies for Responding to Depicted Problem Behavior																									
A. Strategies for solving academic problem																									
0. None	82	92	95	97	96	98	4	9	97	94	97	98	94	98	98	97	95	89	96	96	97	97	96	95	88
1. Help	9	5	0	1	0	0	81	76	0	0	0	0	1	0	0	0	1	4	1	1	0	0	1	0	8
2. Reduce/change task	7	1	1	1	1	0	37	54	0	0	0	0	2	0	0	0	0	4	0	1	0	0	0	0	5
3. Deal with affect	2	3	2	1	0	0	44	41	0	0	0	0	1	0	0	0	0	1	0	1	0	0	0	0	4
4. Involving parents	1	0	0	0	0	0	8	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
5. Diagnostic workups	4	0	0	0	0	0	20	11	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	2	2
6. Other	0	0	0	0	0	0	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B. Problem solving strategies (non academic)																									
0. None	2	4	0	1	0	0	78	77	0	1	0	0	0	0	0	0	0	2	1	2	1	4	0	1	7
1. No response/avoidance	1	0	5	9	1	0	0	0	1	2	7	6	0	0	2	3	7	2	5	2	1	2	11	5	3
2. Teacher delegates problem to other authority	2	1	0	1	1	0	0	0	34	13	0	1	18	27	1	4	1	1	0	1	2	1	1	2	5

Table 11 (cont'd.)

Coding Categories	Failure Syndrome 1	13	Perfectionist 5	17	Under Achiever 9	21	Low Achiever 12	24	Hostile Aggressive 2	14	Passive Aggressive 6	18	Defiant 10	22	Hyper-Active 3	15	Distractible 7	19	Immature 11	23	Rejected by peers 4	16	Shy/ withdrawn 8	20	Mean
3. Extinguish	0	0	0	4	0	0	0	0	1	0	14	8	1	0	1	4	0	0	12	6	0	0	0	1	2
4. Postpone	2	4	1	12	3	2	5	0	5	5	6	3	10	3	1	0	3	2	1	2	4	2	11	3	4
5. Management response	10	6	15	9	19	13	1	3	11	30	52	54	28	34	20	32	53	39	19	11	4	1	19	45	22
6. Tension release	2	0	5	20	0	0	0	1	4	10	8	3	5	5	7	7	6	1	2	4	9	3	6	9	5
7. Reward	23	7	5	0	33	13	0	1	4	8	2	2	3	1	9	11	4	16	0	1	2	0	5	1	6
8. Punishment	6	8	7	1	58	47	2	2	49	46	28	35	73	74	17	32	15	20	5	8	2	0	2	5	23
9. Removal or isolation	0	2	0	0	0	7	0	1	1	6	5	3	5	3	7	15	1	0	0	0	0	2	0	0	2
10. Prescribing/modeling	66	82	70	39	32	24	3	8	24	20	29	34	28	24	58	19	33	41	32	74	15	7	43	43	35
11. Proscribing	1	3	20	12	22	30	1	0	24	23	18	13	19	30	13	31	6	12	56	17	3	2	3	5	16
12. Change physical environment	1	2	1	1	7	31	1	1	2	5	6	2	1	0	19	24	23	32	1	0	0	0	3	9	7
13. Change social environment	8	4	3	4	4	20	2	1	17	13	7	16	4	3	20	6	12	7	13	23	82	87	29	7	16
14. Eliminate source of problem	12	10	20	5	20	14	1	1	29	16	10	9	10	6	21	34	36	29	3	14	19	15	17	30	16
15. Catharsis	0	0	0	1	16	1	0	0	4	12	1	2	3	1	20	36	1	3	1	0	0	4	1	6	5
16. Insight	19	21	38	70	11	23	6	2	22	30	9	12	12	10	37	26	11	11	29	12	32	15	7	10	20
17. Builds self concept	69	47	40	33	5	8	1	5	2	2	2	5	3	0	6	5	4	7	2	1	25	19	53	7	15
18. Relationship	8	2	0	0	0	1	0	0	3	1	0	0	2	0	2	1	0	3	2	0	3	1	23	2	2
19. Involves parents	8	2	0	5	14	7	0	0	19	3	3	2	6	3	4	3	1	2	2	6	2	2	8	7	5
20. Other	3	1	3	1	1	1	0	0	0	3	0	2	2	1	0	2	3	5	1	0	0	0	1	3	1
C. Teacher gathers information before taking action	26	24	3	3	10	3	24	21	65	64	2	11	9	0	13	11	18	25	8	4	29	21	17	25	18

Table 11 (cont'd.)

Coding Categories	Failure Syndrome 1	13	Perfectionist 5	17	Under Achiever 9	21	Low Achiever 12	24	Hostile Aggressive 2	14	Passive Aggressive 6	18	Defiant 10	22	Hyper-Active 3	15	Distractible 7	19	Immature 11	23	Rejected by peers 4	16	Shy/ withdrawn 8	20	Mean
D. Student input re Solutions	3	2	4	1	4	2	1	0	16	12	1	4	0	0	18	5	0	3	1	5	4	7	0	5	4
E. Developing Student Insight																									
0. None	79	75	59	28	86	74	90	94	74	63	88	87	83	88	61	71	86	87	67	85	65	82	90	86	77
1. Recognize own behavior or its consequences	7	17	21	27	10	18	0	0	12	17	2	7	5	5	27	23	8	8	10	6	21	8	3	7	11
2. Causes of own behavior	1	2	7	6	0	0	4	0	6	6	4	0	2	1	3	1	4	0	1	0	0	1	0	1	2
3. Recognize others' behavior	6	3	15	56	2	2	1	0	1	2	0	0	1	1	2	0	0	0	6	2	5	3	4	2	5
4. Causes of others' behavior	0	0	0	0	1	0	0	0	0	2	1	0	0	0	1	0	0	0	7	3	16	4	0	0	1
5. Student's feelings	1	0	1	5	1	0	1	0	4	13	0	1	0	0	6	1	0	0	2	1	7	2	0	0	2
6. Others' feelings	1	0	1	1	0	3	0	0	9	6	3	1	1	2	15	5	0	0	7	1	6	4	1	0	3
7. Teacher's goals/feelings	4	3	8	11	4	7	0	2	3	6	1	5	10	7	1	1	5	2	8	3	0	0	4	6	4
8. Other	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
F. Rationale/Justification for Demands																									
0. No demands	33	12	12	51	11	9	90	83	17	11	16	7	8	1	8	11	16	12	13	11	30	9	47	26	23
1. No rationales	40	49	21	26	46	33	6	9	36	41	47	59	58	44	48	44	59	48	27	36	16	17	24	44	37
2. Cites rules	0	4	34	0	26	23	0	0	7	17	17	19	18	50	10	12	2	6	14	2	10	5	2	8	12
3. Personal appeal	8	6	9	2	7	6	0	0	4	7	10	5	7	7	1	15	5	7	21	4	6	12	17	8	7
4. Moralizes	0	0	1	0	3	5	0	0	18	8	2	2	8	4	3	4	1	1	5	3	8	22	0	0	4
5. Induces empathy	0	0	0	0	0	19	0	0	19	9	10	19	2	11	19	26	1	0	6	1	36	69	1	1	10
6. Logical analysis	5	16	34	15	20	32	0	1	10	14	13	9	12	5	19	15	20	29	24	33	12	14	10	18	16
7. Pride/self concept	20	23	6	9	13	7	1	4	2	9	4	2	3	2	7	3	5	4	12	27	5	10	9	3	8

Table 11 (cont'd.)

Coding Categories	Failure Syndrome 1	13	Perfectionist 5	17	Under Achiever 9	21	Low Achiever 12	24	Hostile Aggressive 2	14	Passive Aggressive 6	18	Defiant 10	22	Hyper-Active 3	15	Distractible 7	19	Immature 11	23	Rejected by peers 4	16	Shy/ withdrawn 8	20	Mean
8. Safety	0	0	1	0	0	0	0	0	0	3	0	1	1	0	3	2	0	0	0	0	0	0	0	0	0
9. Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

[a]The numbers are the numbers of teachers whose responses to the vignette in question were coded into the corresponding coding categories.

Just as they usually recognized that depicted problems were parts of chronic patterns rather than isolated events, the teachers usually constructed proactive responses to the vignettes suggesting organized and programmatic attempts to deal with the larger chronic syndrome rather than merely responding to the immediate problem or responding as if there were no problem at all (see Section IC of Table 11). Even so, the elements of their reported strategies that involved verbal communication to the problem student were usually rated as minimally instructive rather than as moderately or highly instructive, and for some vignettes (especially those depicting passive-aggressive and defiant students), the typical response was confined to imperative elements and contained no instructive elements at all. Thus, like the interview responses, the vignette responses indicated that even though the teachers recognized the chronic nature of the problems and tried to deal with them in proactive, programmatic ways, their responses seldom emphasized counseling, development of insight, or extended instruction in coping skills.

These trends are further illustrated in the data of Section ID concerning the goals of the teachers' influence attempts. Per vignette, strategies involving attempts to control through threat or punishment were coded for an average of 47 teachers, strategies involving attempts to improve mental hygiene or coping skills were coded for an average of 39 teachers, and strategies involving attempts to shape behavior through rewards were coded for an average of 30 teachers. The variance here is more interesting than the means: Once again, we see that teachers' responses were primarily controlling or punitive for underachieving, hostile-aggressive, passive-aggressive, defiant, hyperactive, and immature students, but primarily sympathetic and oriented toward helping failure syndrome, perfectionist, low achieving, distractible, rejected, and shy/withdrawn students. Thus, the teachers appeared to be much less

sympathetic to disruptive or irritating students than they were to students whose problems were not so disruptive or irritating.

There were also some interesting contrasts in the relative emphasis on attempts to improve mental hygiene or coping skills through counseling or instruction as opposed to attempts to shape desirable behavior through incentives and rewards. Both methods were mentioned frequently for some problem types (failure syndrome, perfectionist); counseling or instruction was mentioned more often than shaping for other problem types (low achiever, hostile-aggressive, hyperactive, immature, rejected by peers); shaping was mentioned more often than counseling or instruction for other problem types (underachiever, distractible, shy/withdrawn); and neither method was mentioned very frequently for still other problem types (passive-aggressive, defiant). The two vignettes representing a particular problem type usually elicited similar responses from the teachers, although noticeable differences appeared in a few cases (perfectionist, immature, shy/withdrawn).

Section II of Table 11 presents data from the coding of attributional inferences in the teachers' responses to the vignettes. Most teachers perceived the problems as stable over time (IID1) and generalized across situations (IIE1), as we had intended in constructing the vignettes. Most teachers also attributed the problem behavior to causes located within the students themselves (mean for Category IIA1 = 73), rather than attributing it to causes external to the student, attributing it to an interaction between internal and external causes, or mentioning multiple possibilities. Medway (1979) and Ysseldyke, Christenson, Algozzine, and Thurlow (1983) reported similar findings concerning elementary teachers' attributions for students' behavior problems. In general, teachers tend to attribute such problems primarily to factors located within the students themselves (ability, motivation, personality), occasionally to home and background factors, and only rarely to teaching-related

factors (Medway, 1979). Thus, despite the heavy emphasis on parental modeling and childrearing practices and on other environmental factors by experts describing the nature and causes of childhood psychopathology, the teachers usually did not mention such causes in their responses to the vignettes. Instead, they tended to attribute problem behaviors to causes located within the students themselves. Perhaps they would have mentioned environmental causes more frequently if we had probed more insistently for explanations of how the depicted problem students had come to be the way they were.

Although the teachers tended to attribute problem behaviors to causes located within the students themselves, they were not especially likely to make attributional inferences suggesting that the students should be held blameworthy for their behavior. On the average, less than half of the teachers suggested that the students could control their behavior if they chose to do so (mean for Category IIB1 = 44), and even fewer teachers suggested that the problem students were misbehaving intentionally (mean for Category IIC1 = 31). There was great variation across vignettes in these attributional inferences, however. Some problem types were seen as misbehaving intentionally (hostile-aggressive, defiant), and others were seen as able to control their behavior problem if they chose to do so even though they might not be misbehaving intentionally (hyperactive, distractible).

The second part of Section II in Table 11 presents data for teachers' perceptions and attributional inferences concerning their own role in causing and potentially eliminating the problem. Just as in their interview responses, in their vignette responses the teachers located responsibility for the problem in sources external to themselves and usually internal to the problem students (mean for Category IIF2 = 90). They usually believed that they could effect significant change in the problem if they attempted to do so (mean for Category IIG1 = 68), although they were less confident that any such improvements would

be stable over time (mean for Category IIH1 = 57) or would generalize across situations (mean for Category II.I1 = 41). Again, there was great variation in these responses across vignettes. The teachers felt most confident about their abilities to improve the problem behavior shown by failure syndrome, perfectionist, passive-aggressive, distractible, immature, and shy/withdrawn students, and least confident about improving low achieving, hostile-aggressive, and defiant students.

Section III of Table 11 presents data on teachers' reported attempts to manipulate student behavior through rewards (IIIA), punishments (IIIB), supportive behavior (IIIC), or threatening or pressuring behavior (IIID). These data indicate that the teachers very seldom mentioned offering incentives or rewards to problem students, but usually mentioned one or more of the supportive behaviors listed in Section IIIC. The most frequently mentioned supportive behaviors were instruction (35), kid gloves treatment (18), involving peers for support of the problem student (16), "other" unclassified supportive behaviors (16), and encouragement (10). Other forms of support appeared less frequently, although the teachers often suggested praise for failure syndrome, perfectionist, and shy/withdrawn students, providing comfort or reassurance for perfectionist students, publicly defending or modeling acceptance of rejected students, supportive isolation for hyperactive and distractible students, and involving other adult professionals for low achievers. In general, few supportive behaviors were reported among responses to disruptive or irritating student behavior.

Typically, only about one-fourth of the teachers mentioned punishments or threatening or pressuring behaviors in response to the vignettes, although there was great variation across vignettes in this regard. Punishment was almost certain for defiant students, and highly likely for hostile-aggressive students and underachievers. One of the hyperactive vignettes (Vignette 3) also

elicited frequent mention of punishment, although most of this was in the form of restitution for damages caused by the student (and thus did not involve punishment in the more typical sense of the term). In general, both punishments and threatening/pressuring behaviors were mentioned most often as responses to disruptive or irritating student behavior, although a few relationships appeared unique to particular vignettes. Restitution was required of the hyperactive student who caused property damage and the hostile-aggressive student who stole money; punitive isolation was prescribed for the underachiever who persisted in socializing with neighbors instead of working on assignments; physical punishment was rarely mentioned but occasionally was suggested for hostile-aggressive and especially defiant students; aggression and especially defiance were likely to result in referral to the principal for administrative action; public "diagnosing" of the problem students' behavior or intentions was rare but occasionally was mentioned in connection with passive-aggressive behavior; and "third degree" grilling was also rare but occasionally mentioned in connection with hostile-aggressive behavior.

Section IV of Table 11 presents data on commonly mentioned strategies for responding to the depicted problem behavior. Section IVA deals with strategies for responding to <u>academic</u> problems. The vast majority of these were mentioned in connection with the two low achiever vignettes. Instructional assistance or help was the most common strategy for responding to academic problems, although reducing or changing the task was a common response, as was attempting to deal with the student's negative affect (feelings of failure or hopelessness).

Section IVB presents data on strategies for solving <u>nonacademic</u> problems. One or more such strategies typically were mentioned in response to all of the vignettes except for the two dealing with low achievers. The most commonly mentioned strategies were prescribing or modeling appropriate behavior (35), punishment (23), brief minimal interventions called "management responses" (22),

attempts to develop student insight (20), proscribing by stating limits or reminding the student of rules against misbehavior (16), changing the student's social environment (16), attempting to eliminate the perceived source of the problem (16), and attempting to develop the student's self-concept (15). Other responses appeared less frequently, although delegation of the problem to some other authority was mentioned often for hostile-aggressive or defiant students, attempts to extinguish by ignoring for passive-aggressive and immature students, rewards for underachievers, removal or isolation for hyperactive students, changing the physical environment for hyperactive and distractible students, catharsis for hyperactive students, relationship building for one of the shy/withdrawn students (Vignette 8), and involving the parents for underachievers and one of the hostile-aggressive students (Vignette 2). Once again, the sympathetic and help-oriented strategies were mentioned most often in response to behaviors that were not disruptive or irritating to the teacher, and the control-oriented or punitive responses were mentioned most often in connection with disruptive or irritating behaviors.

Section IVC indicates that teachers usually did not gather information before taking action except in responding to the hostile-aggressive vignettes (where many teachers mentioned taking time to hear both sides of the story before deciding what to do).

Section IVD indicates that teachers seldom solicited student input before deciding on a response (again with the exception of the hostile-aggressive vignettes, and this time also one of the hyperactive vignettes). In the exceptional cases, the solicited student input usually concerned the appropriateness of proposed punishments or restitution requirements.

Section IVE concerns attempts to develop student insight. Typically, no such attempts were reported (mean for Category IVE0 = 77). When such attempts were made, they tended to be made with students whose behavior was not

disruptive or irritating to the teacher, and in connection with behavior problems that the teacher saw as due at least in part to the student's lack of awareness of his or her own behavior or its consequences to others. There were also occasional attempts to get the problem student to recognize the behavior of others (especially to get perfectionist students to see that others make mistakes and are not perfect), to see the causes of others' behavior (especially to get rejected students to see that their own inappropriate behavior was causing peers to reject them), to become more aware of other's feelings (especially to make hostile-aggressive and hyperactive students more aware of the anger they cause in others), or to become more aware of the teacher's goals or feelings (especially to show perfectionists that the teacher frequently made mistakes and did not feel the need to be perfect, and to show defiant students that the teacher was merely trying to fulfill job responsibilities or uphold school rules and was not picking on them when making behavioral demands).

Finally, Section IVF of Table 11 presents data on the rationales or justifications that the teachers made in connection with their behavioral demands on students. These data indicate that sometimes the teachers made no behavioral demands at all (mean for Category IVF0 = 23), and that when they did make such demands, they presented accompanying rationales or justifications only about half of the time (mean for Category IVF1 = 37). Failure to make any behavioral demands at all was typical only for the two low achiever vignettes; making demands but failing to give accompanying rationales or justifications was typical for the passive-aggressive, defiant, hyperactive, and distractible vignettes.

There was less similarity in the types of justifications or rationales that the teachers included in their responses to the paired vignettes for each problem student type than in the other coding categories for the vignettes, indicating that when rationales or justifications for demands were given, they tended to incorporate particular aspects of the problem situation as depicted

in a given vignette. For example, citing rules was common in response to the perfectionist, Vignette 5, in which the student was depicted as repeatedly using new sheets of paper (the teachers often suggested that one piece of paper per student was the classroom rule). Similarly, moralizing and attempts to induce empathy were common in responses to vignettes that involved mistreating or frustrating someone else (Vignettes 2, 3, 4, 15, 16, 18, and 21). More will be said about these vignette-specific responses in subsequent sections.

Conclusions Regarding General Trends in the Teachers' Responses

Although incomplete (Tables 10 and 11 present data from the Universal coding systems but not from the Unique coding systems), the data presented so far are representative of the teachers' responses to our interviews and vignettes, and thus provide a basis for assessment of general trends in those responses. In their implications about the extent and quality of teachers' readiness to understand and cope with problem students, these general trends are encouraging in some respects but discouraging in others.

They are encouraging in that they suggest that teachers have become notably more knowledgeable about problem students over the last 20 years. Barnes (1963) reported that elementary teachers' attempts to describe the nature and causes of their students' problem behaviors were often vague or confused, and that there was congruence between their diagnoses (causal attributions) and their prescriptions (suggested remedial actions) only 26% of the time. The present sample of teachers revealed more sophistication about the nature and causes of student behavior problems and much higher congruence between diagnoses and prescriptions.

In contrast, the teachers in the present study showed little familiarity with the theoretical concepts and treatment principles propounded by sources of expert advice on diagnosis and treatment of problem students. Even though

these were all experienced teachers and half had been nominated by their principals as outstanding at dealing with problem students, and even though their responses were usually internally consistent and seemingly appropriate as far as they went, most of these responses were relatively limited and unsystematic.

Other than a few concepts and techniques that some of the teachers had picked up through brief inservice workshops or individual professional reading, responses were based on common sense and personal experience that was only partially examined and articulated, rather than on systematic, detailed, and integrated knowledge. The teachers were aware that they could attempt to control student behavior through reward or punishment, and they realized the value of getting to know problem students personally and talking to them about their problem behavior. However, what the teachers had to say about controlling behavior through reward and punishment usually fell far short of systematic knowledge about behavior modification techniques, and what they had to say about using personal relationships and talking to students about their problems usually fell far short of systematic knowledge about counseling and psychotherapy techniques.

Given that few of these teachers had had significant course work in classroom management, let alone in methods of diagnosing and treating problem students, these general trends in their responses are not surprising. However, they do underscore the fact that even contemporary teachers considered experts at dealing with problem students are usually working from relatively global intuitions developed through experience rather than from systematic and well articulated knowledge developed through formal preservice or inservice teacher education.

Different Responses to Different Categories of Problem Behavior

The data displayed in Tables 10 and 11 reveal certain general trends: emphasis on situational and primarily brief verbal responses rather than on more intensive or time-consuming responses and relatively infrequent mention of concepts, principles, or strategies propounded by treatment experts (psychotherapists, behavior modifiers). However, these data also reveal patterns of differential teacher response to different types of problem behavior. In particular, we have repeatedly noted a tendency for teachers to respond with concern and attempts to help when the depicted problems are purely academic (low achievers) or confined to anxiety or difficulty in coping with demands of schooling (failure syndrome, perfectionist, rejected by peers) but to respond with anger or rejection and an orientation toward controlling or punishing rather than helping when the depicted problem is disruptive or threatening to the teacher's authority (defiant, hostile-aggressive).

Similar trends were observed in data reviewed by Brophy and Good (1974) and by Brophy, Evertson, Anderson, Baum, and Crawford (1981) concerning teachers' differential attitudes toward and responses to different types of student, as well as in several recent studies on these topics (Algozzine, 1980; Brooks, Newbolt, & Archer, 1985; Coleman & Gilliam, 1983; Cundiff, 1985; DeStefano, Gesten, & Cowen, 1977; Hutton, 1984; Lewin, Nelson, & Tollefson, 1983; Medway, 1979; Natriello & Dornbusch, 1984; Safran & Safran, 1984). Furthermore, similar trends have been reported in studies of parents' responses to problem behaviors displayed by children in nonschool situations (Brunk & Henggeler, 1984; Kuczynski, 1984). In summary, there appear to be general tendencies for adults to respond with concern, assistance, and attempts to effect long-term solutions when children display problems that do not directly threaten or irritate the adults but to respond with anger, rejection, and

emphasis on short-term control or punishment when children behave in a threatening or irritating manner.

Brophy et al. (1981) found that teachers were especially likely to become rejecting and punitive when student misbehavior was threatening rather than merely irritating. Even frequent misconduct did not seem to impair the teacher-student relationship so long as the misconduct was not disruptive or aggressive (i.e., it was confined to such problems as hyperactivity, distractibility, excessive socializing with peers, or forgetfulness about classroom responsibilities) and the student responded positively or at least neutrally to the teacher's interventions. However, teachers responded quite negatively to hostile-aggressive and especially defiant students and to any students who displayed a surly or insolent attitude during disciplinary interactions. These authors suggest that individual students' emotional responses to teachers (as persons in general and as authority figures in particular) condition teachers' attitudes toward and patterns of interaction with the students. Even if they present behavior problems, students who defer to teachers' authority and respond positively to their interventions reinforce such intervention attempts and thus tend to elicit teacher concern and assistance. In contrast, students who persistently defy teachers' authority with sullen negativism or open hostility tend to elicit rejection and punitiveness from their teachers. Thus, a student's personal response to the teacher's intervention attempts is one determinant of the nature of those attempts.

Another factor is the degree to which the student's problem behavior threatens the teacher's ability to predict and control the events that occur in the classroom. Cooper (1979) has shown that teachers tend to minimize the frequency and length of their public interactions with students whose behavior is unpredictable or likely to disrupt the flow of an academic activity and in general to be more surveillant and controlling toward these students than toward

other students. Fearing disruptions that might lead to loss of classroom control, teachers (especially those who are less confident and successful in managing classrooms) will try to keep such disruptions from occurring and to move quickly to squelch those that do occur.

Thus, existing research suggests that teachers are likely to respond more negatively (with less concern and help, and more control or punishment) when the misbehavior is disruptive rather than nondisruptive and when the student responds negatively rather than neutrally or positively to the teacher. Data collected in the present study show that differential teacher response to students' problem behavior is also predictable from information about the ownership of the problem or about the teacher's attributional inferences concerning the problem.

The Influence of Problem Ownership

The concept of problem ownership has been popularized by writers concerned with psychotherapy and parenting. Gordon (1970) posited that conflicts between parents and children could be categorized according to the degree to which each party was frustrating the other's needs. Parents own the problem when their needs are being frustrated but the children's needs are not; children own the problem when their needs are being frustrated but the parents' are not; and a shared problem exists when each party is frustrating the needs of the other. Research on parents' responses to vignettes involving conflicts with children has shown that parents tend to adopt a sympathetic, solution-oriented stance in response to problems owned by the children but to assume an unsympathetic, authoritarian stance when the children present problems that are owned by the parents themselves (Stollak, Scholom, Kallman, & Saturansky, 1973).

Similar trends were seen in the present study, as well. Following Gordon (1974), the vignettes were classified into three types: (a) vignettes

depicting teacher-owned problems, in which the student behavior interfered with the teacher's meeting his or her own needs or caused the teacher to feel frustrated, upset, irritated, or angry (Vignettes 2, 6, 9, 10, 14, 18, 21, and 22); (b) vignettes depicting shared problems, in which the teacher and a student interfered with each other's need satisfaction (Vignettes 1, 3, 7, 8, 11, 13, 15, 19, and 20); and (3) vignettes depicting student-owned problems, in which students' need satisfaction was frustrated by people or events that did not include the teacher (Vignettes 4, 5, 12, 16, 17, 23, and 24).

Teachers are ultimately responsible for what occurs in their classrooms, of course, and therefore have at least some degree of ownership in all problems that occur there. However, the problems depicted in our vignettes can be located on a continuum ranging from primarily teacher-owned problems through more equally shared problems to primarily student-owned problems, according to the degree to which the teacher behavior frustrates the need satisfaction of students, or vice versa. In the vignettes depicting teacher-owned problems, the students' actions threaten the teacher's needs for authority and control. In the vignettes depicting shared problems, the students do not directly threaten the teacher's authority, but they have difficulty living up to the demands of the ideal student role, and in the process, they create classroom management or control problems for the teacher. In the vignettes depicting student-owned problems, the students suffer from devaluation, feelings of inadequacy, or internal conflicts that frustrate progress toward their own goals but do not directly thwart the need satisfaction of the teacher.

Analysis of variance in the teachers' responses to these three sets of vignettes (reported in detail in Brophy and Rohrkemper, 1981 and in Rohrkemper and Brophy, 1983) indicated that even though most teachers attributed all problems to causes located within the student (the mean proportions for teacher owned problems, shared problems, and student-owned problems, respectively, were

.77, .76, and .70), there were large differences across the three sets of vignettes in the proportions of teachers who believed that the student could control the problem behavior if he or she chose to do so (.79, .37, .16) and in the proportions who believed that the student was producing the problem behavior intentionally (.70, .19, .05). There were also important differences in the degree to which teachers believed that they could effect significant change in the problem behavior (.61, .78, .66) and believed that such improvements would be stable across time (.54, .57, .64) or generalized across situations (.32, .41, .54). In general, the teachers saw the students who presented teacher-owned problems as misbehaving intentionally, and they were pessimistic about their abilities to produce stable and generalized improvements in these students. In contrast, they were most confident about being able to produce stable and generalized improvements in the students who presented student-owned problems, even though they usually depicted these students as presently unable to control their problem behavior.

In effect, students exhibiting student-owned problems were seen as victims of factors beyond their control rather than as individuals responsible for their problems, whereas students presenting teacher-owned problems were seen as blameworthy for problems that they had created themselves. For example, Carl, the underachiever in Vignette 9, is seen as making paper airplanes instead of doing his work because he chooses to and not because he does not understand the directions or know how to do the assignment. In contrast, Jeff, the low achiever in Vignette 12, has a student-owned problem. His failure to answer is attributed to low ability and not to poor motivation or other causes that he is expected to control (as Carl is). Betty, the immature student in Vignette 11, presents a shared problem when she tattles to the teacher. As with the other shared problems, this one produced less teacher consensus about the controllability of the problem behavior. Some teachers believed that Betty should

know better than to tattle such things and would hold her responsible for failure to exercise control. Other teachers, however, saw Betty as acting according to what she believed she should or must do and would not attribute controllability to her.

In general, shared problems and student-owned problems were likely to be seen as unintentional even if seen as controllable; that is, the students were seen as presenting problem behavior because they did not know any better or were prone to forget instructions, rather than because of a deliberate intention to misbehave. For example, Jeff, the low achiever in Vignette 12, was not seen as trying to get out of class recitation, to play to the class, to irritate the teacher, or in any other way to cause a problem intentionally. Instead, his problem was attributed to limited ability, something over which he had no control. Bill, the hyperactive student in Vignette 3, created a shared problem when he broke the sculpture. A majority of the teachers saw him as able to control his hyperactive behavior and thus as responsible for the problem to a degree, but most of these teachers also recognized that it was difficult for Bill to control his movements, so they viewed the incident as an unfortunate accident and not as an intentional act of destruction. In contrast, Carl, the underachiever in Vignette 9, typically was seen as misbehaving intentionally in making paper airplanes, perhaps as an act of defiance, to get attention, or to show off to classmates.

Besides being related to teachers' attributional inferences, the problem ownership classifications of the vignettes were related to teachers' suggested strategies for responding to the depicted problems. Responses to vignettes depicting teacher-owned problems featured negative expectations and restricted language. Such responses were often confined to terse demands for behavior change, with little explanation of rationales underlying these demands and little emphasis on instruction about appropriate behavior. Goals typically

were limited to short-term control of symptomatic behavior, without emphasis on attempts to develop more desirable behaviors (rewards/shaping goals) or on preventive/remedial attempts to address possible causes of the problem behavior (mental health goals). Teachers' responses to teacher-owned problems revealed little emphasis on rewards or supportive teacher behavior but frequent reliance on punishment or threatening/pressuring behavior. In contrast, teachers' responses to student-owned problems featured extensive talk designed to provide support, nurturance, and instruction. Teachers frequently mentioned working on long-term goals with these students, attempting to improve their mental health or adjustment by improving their self-evaluations or teaching them coping techniques that would allow them to succeed in situations in which they were now failing.

Teachers' responses to shared problems fell in between these extremes and yet yielded a third distinctive pattern of attributions and response strategies. Teachers' goals for the students in these shared problem situations were more varied, but were primarily long term, with emphasis on replacing current problem behavior with more appropriate behavior. This is in contrast to both the short-term desist techniques employed in response to teacher-owned problems and the more generalized long-term mental health improvement goals characteristic of responses to student-owned problems. Given that students presented shared problems were seen as acting unintentionally but perhaps carelessly, and as needing to learn self-control, teachers spoke of trying to improve their behavior but often only within specific contexts and perhaps with limited stability over time.

Specifically, teachers' responses to shared problems often mentioned behavior modification strategies featuring high teacher involvement in the form of close supervision or provision of cues or other help. There was some use of language for instruction or socialization, but usually the strategies mentioned

did not rely much on language as the major treatment. Instead, there was emphasis on environmental engineering, modeling, or shaping of students' actions without extended explanations. The teachers' responses suggested that students presenting shared problems would receive the most rewards, as well as their share of punishments. In addition, they would be praised frequently, especially with praise tied to specific behavior (e.g., praise that was used as part of a behavior modification strategy rather than as part of an attempt to encourage or build close relationships with the students).

This behavior modification emphasis in response to shared problems is consistent with the teachers' attributions about the causes of such problems and their beliefs that any changes in these students would probably be specific and unstable. They expected these students to be cooperative but also believed that continuing environmental manipulations would be needed to maintain appropriate behavior.

These findings indicate that the concept of problem ownership is useful in understanding and predicting teachers' responses to problem students. This was true even though few teachers were familiar with Gordon's writings or trained to respond to problems along the lines he suggests. Gordon (1974) suggests active listening, empathy, and other nondirective therapy techniques for dealing with student-owned problems, and communication through "I" messages followed by negotiation of commitments for change in behavior for dealing with teacher-owned problems. These techniques were rarely mentioned by the teachers in this study. The teachers did respond sympathetically to students with student-owned problems, although they usually responded with a combination of environmental manipulation, advice, and suggestions, rather than with active listening. In dealing with students presenting teacher-owned problems, the teachers were much more likely to respond with power assertion than to engage in the kind of problem solving negotiations that Gordon recommends. Thus, although the

problem ownership concept was useful in analyzing teachers' attributions and strategies for responding to problem students, the problem ownership concept typically was not used consciously by the teachers themselves, and certainly was not used in the ways that Gordon recommends.

The Influence of Teachers' Attributional Inferences

The attributional approach to the study of achievement motivation (Weiner, 1979) has become well known to educational psychologists in recent years. Less well known, but perhaps equally important, are attributional analyses of social situations in which perceivers are responding to the behavior of target individuals. Some of these analyses focus on people's thinking, emotional reactions, and behavior in helping situations (e.g., situations in which a victim is suffering from some kind of frustration or deprivation and an onlooker must decide whether or not to offer help). Analyses of onlooker behavior in helping situations indicate that the likelihood of helping the victim depends on the onlooker's attributions concerning the locus of causality of the victim's problem and the degree of control that the victim has over his or her plight (Piliavin et al., 1969; Weiner, 1980). Help is more likely when the person is seen as a victim of circumstances beyond his or her control than when the person is seen as having gotten into trouble through his or her own poor decisions or failure to exercise self control. Also, research on parole decisions (Carroll & Payne, 1977) suggests that punishment is most harsh and parole least likely when the offender is seen as the source of the problem, as having acted intentionally, and as likely to persist in criminal behavior in the future. Conversely, offenders are less likely to be punished severely and more likely to receive parole when their crimes are judged to result from external, unintentional, and unstable causes. Finally, research on perceivers' attributional inferences about the causes of a target person's undesirable behavior as they

relate to the perceivers' affective responses has shown that perceivers tend to respond with sympathy when they see the problems as caused by uncontrollable factors but to respond with anger when they see the target individuals as able to control their behavior if they choose to do so (Graham, 1984; Weiner, Graham, & Chandler, 1982; Weiner, Graham, Taylor, & Meyer, 1983). Angry, punitive responses are especially likely when the target individuals are seen as causing problems intentionally (Maselli & Altrocchi, 1969; Shaver, 1985; Weiner, Graham, & Chandler, 1982).

We expected to find similar effects in the teachers' responses to our vignettes. Specifically, we expected that responses would be more control-and punishment-oriented and less sympathetic and help-oriented when problem behavior was attributed to causes located within the student rather than the external environment and when it was seen as controllable, intentional, stable over time, and generalized across situations.

These patterns were in fact observed in the correlations between codes for teachers' attributional inferences and codes for teachers' suggested strategies for responding to the problem. Punitive, rejecting responses were associated with attributional inferences involving controllability and especially intentionality: The teachers were most likely to get angry and come down hard on students whom they perceived as misbehaving intentionally (all the more so if the misbehavior itself was threatening or irritating to them).

These attributional inferences and related decisions about response strategies are not unique to teachers. Instead, they appear to be part of a natural human process of making sense of the social environment. However, it must be noted that this natural process is not very effective or professionally appropriate for teachers or others whose professional obligations involve more commitment to helping their clients than can be expected of an onlooker encountering a troubled stranger. "Natural" attributions, especially as they apply to

students presenting teacher-owned problems, can lead to counterproductive expectations and behavior, resulting in deterioration of the teacher-student relationship and escalation of the behavior problem. It seems clear that teachers will need to be made more aware of the effects that their attributions can have on their efficacy beliefs (e.g., their beliefs in their abilities to elicit improvements in student conduct) and subsequent problem-solving behavior, so that they can learn to construct response strategies that extend beyond mere control and desist techniques. In a sense, the education of teachers in strategies for managing classrooms and responding to problem students can be seen as a process of replacing patterns of thought and action that develop naturally through normal social experience with different patterns of thought and action that are more suited to successful accomplishment of the goals associated with the teacher's professional role.

Different Categories of Teachers Produce Different Response Patterns

We have reviewed data on general trends in the teachers' responses to our interviews and vignettes and also shown that, in addition to these general trends, there were consistent patterns of differential teacher response to different types of problem student. We now turn to data indicating that there also were differences in general patterns of response (e.g., somewhat different "general trends") for different subgroups of teachers. Specifically, such differential general patterns were seen for subgroups of teachers who differed in role definition (instructor vs. socializer), teaching location (Small City vs. inner-city Big City), grade level (K-3 vs. 4-6), or gender (male teachers vs. female teachers).

Teachers Who Favored the Instructor Role vs. Teachers Who Favored the Socializer Role

Teachers' general beliefs, attitudes, and expectations affect their behavior in the classroom. For example, various researchers have reported that teachers' conceptions of the process of reading affect the content and nature of their reading instruction (Duffy & Anderson, 1982), that teachers' attitudes toward different subject matter areas affect the amounts of time that they allocate and devote to instruction in those areas (Schmidt & Buchmann, 1983), and that teachers who are subject matter-oriented tend to teach each subject separately and work with the whole class as a single group, whereas teachers who are oriented toward fostering student development tend to use the integrated day approach and spend more time working with students individually (Bussis, Chittenden, & Amarel, 1976). Good and Brophy (1986, 1987) have argued that particularly broad-ranging and powerful differences in teachers' behavior in the classroom can be expected to flow from teachers' role definitions--their general beliefs about what teachers should accomplish if they do their job effectively, along with associated goal priorities and beliefs about what teaching tasks and functions are necessary or appropriate to successful performance of the teacher role.

Two of the more generally recognized and accepted aspects of the teacher role are instruction (presenting academic content to students and supervising their mastery of it) and socialization (fostering students' personal mental health and adjustment, promoting good interpersonal and group relations, and preparing students to be good citizens in society at large). Teachers in the present study were asked about their relative emphasis on these two teaching roles, in the following interview question:

> Teachers differ in their relative emphasis on instruction vs. child socialization (development of positive self-concept, interaction skills with adults and peers). Some teachers believe that their primary goal is instructing students in the curriculum. Other teachers

see subject matter instruction as secondary to the fostering of positive, insightful self-growth of students. How would you characterize your relative emphasis on instruction vs. socialization in your teaching?

Check <u>one</u>.

_____ Much heavier emphasis on instruction vs. socialization

_____ Somewhat more emphasis on instruction vs. socialization

_____ Somewhat more emphasis on socialization vs. instruction

_____ Much heavier emphasis on socialization vs. instruction

Data were available for this question on 84 of the teachers, of whom 53 were classified as "instructors" who placed more emphasis on academic instruction than on socialization (e.g., they chose one of the first two categories above), and 31 were identified as "socializers" who placed more emphasis on socialization than instruction (e.g., they chose the third or fourth category). It was mildly surprising that more of the teachers were classified as instructors than were classified as socializers, because open-ended questioning of elementary teachers about their goals usually yields much more emphasis on affective goals and student socialization than on cognitive goals and instruction in the formal curriculum (Prawat, 1985). Perhaps the difference occurred because the teachers in this study were somewhat more urban and more experienced than a random sample of teachers would have been.

It is also possible, of course, that open-ended questioning of the kind used in the studies reviewed by Prawat (1985) would have elicited similar responses from the present sample of teachers. Rather than invite teachers to talk about whatever goals they chose to emphasize, our role definition question forced them to select one of four choices that described their <u>relative</u> emphasis on instructional versus socialization goals. This forced-choice format may have caused many teachers to recognize that they place first priority on instructional goals even though they like to talk about socialization goals. In

any case, the instructional emphasis reported by the majority of teachers fits with the emphasis observed in the teachers' classrooms: The majority of the time spent in these classrooms, including those of teachers who described themselves as socializers more than instructors, was spent in activities designed to promote mastery of the formal curriculum rather than in activities designed to promote personal or social development in the students.

Halperin (1976) reported similar findings: Systematic classroom observation did not reveal significant differences in the nature of the activities going on in the classrooms taught by teachers who emphasized academic outcomes compared to those of teachers who emphasized social-emotional outcomes. Even so, the teachers' goal ideologies were recognizable through more subtle cues. Teachers who emphasized academic outcomes, for example, were more explicit about what constituted "good work" in their classrooms.

Fisher et al. (1980) found that teachers with an academic emphasis allocated more classroom time to academic instruction (and in fact, elicited more achievement gain from their students) than did teachers with an affective emphasis. Prawat (1985) and Prawat and Nickerson (1985) review data indicating that teachers with an extreme affective emphasis may not only produce less achievement gain but also be less effective in producing affective gains (improvements in students' self-concepts or in their prosocial or cooperative behavior) than teachers who place more stress on cognitive gains. These authors suggest that teachers who project a balanced set of goals (stressing the importance of both types of goals) may be more effective than teachers who show imbalance by placing extreme stress on one set of goals at the expense of the other. Teachers who place extreme stress on affective goals at the expense of cognitive goals appear to be particularly ineffective.

This possibility could not be assessed in the present study because the vast majority of the teachers selected one of the intermediate options rather

than one of the extreme options in responding to our role definition question. However, the Prawat (1985) and Prawat and Nickerson (1985) findings are useful in setting a context for consideration of the present data on teachers' role definitions. They serve as a reminder that measures of role definition are measures of teacher style or preference rather than teacher effectiveness, and that adoption of a particular goal by a teacher does not guarantee that the teacher will employ methods that are effective in promoting realization of that goal. Our role definition findings (also described in Brophy, 1985, and reviewed in more detail in Brophy and Rohrkemper, 1982) further underscore the need for these cautions.

In general, our data suggest that the 31 "socializers" were more oriented toward dealing with students' personal and behavioral problems than the 53 "instructors" were, but were not necessarily more successful in doing so. The classroom observation data indicated that the socializers were relatively more likely to signal appropriate behavior or cue their students, to state rules or expectations, and to use "I" statements, to make personal appeals, or to appeal to safety as reasons for requested changes in student behavior. In contrast, instructors made relatively more use of techniques that involved less personalized interaction with the students. These teachers were more likely to refer problem students to the principal, the parents, or other resource people and, when they did intervene personally, they were more likely to cue or criticize students through rhetorical questions or to rely on relatively impersonal problem solving questions and techniques than to inject personal appeals or expectation statements.

Observation data indicate that the problem of student failure to change behavior following teacher intervention occurred more often in the classrooms of socializers than in the classrooms of instructors. However, despite this observed difference in immediate response to teacher interventions, there was no

significant difference between the instructors and the socializers in either the principals' or the observers' ratings of teacher effectiveness at dealing with problem students.

There were some contrasting patterns with different problem student types, however. The observers reported that the socializers were especially ineffective in dealing with underachievers and that they had difficulty achieving smooth transitions between activities. Teachers' self-report data indicated that instructors stressed the importance of the teacher acting as a fair and consistent authority figure, while the socializers stressed the importance of attributes such as patience and love for children. Instructors tended to report a dislike for underachieving students, while socializers reported more dislike for defiant or hostile-aggressive students. Finally, instructors reported more use of peer tutoring or tutoring by older students (for low achievers), whereas socializers reported more use of seating strategies that involved keeping close friends separated from one another (for underachievers). These various findings all suggest that the instructors were concerned primarily with setting up the classroom as a learning environment and interacting with the students primarily within their own roles as learners, whereas the socializers were more oriented toward building personal relationships with their students and using these relationships to promote good personal adjustment and classroom conduct.

Similar patterns were seen in the differences between the responses of the instructors and the responses of the socializers to our interviews and vignettes. Differences in the interview responses were minor in degree but consistent in pattern with the role definitions adopted by the two groups of teachers. Instructors were more likely to deliver brief verbal messages involving persuasion, criticism, or proscribing/setting limits. Socializers were more likely to mention more extensive interventions, especially behavior

modification techniques, and to mention long-term prevention or cure strategies. Instructors were somewhat more oriented toward helping distractible, immature, and shy/withdrawn students (who can be helped without deviating much from the instructor role, except to provide extra support and personalized attention), whereas socializers were somewhat more oriented toward helping underachieving, hostile-aggressive, and defiant students (who present challenges to their motivational, socializational, and relationship-building skills). In the case of underachieving students, for example, the instructors more often confined their general problem-solving approach to controlling or suppressing undesirable behavior and were more often coded for mentioning strategies of humor/tension release and changing the physical environment or isolating the student from peers. In contrast, the socializers were more likely to monitor underachievers closely and attempt to inhibit inappropriate behavior through physical proximity, voice control, or eye contact but were also more likely to attempt to counsel them with the intention of improving their insight into their own behavior. Also, socializers were willing to assume at least partial responsibility for the problem (typically suggesting that they may have been giving inappropriate work to the underachieving student and suggesting that a change in the nature of assignments might be in order).

In the case of responses to distractible students, instructors appeared to be motivated primarily by instructional concerns and yet mentioned attempting to diagnose and eliminate the source of the problem and attempting to help the student through counseling. Socializers were more likely to confine their problem-solving approach to controlling or suppressing undesirable behavior, and they more often mentioned the techniques of inhibiting problem behavior through physical proximity, voice control, or eye contact, attempting to build the student's self-concept, and involving outside medical or mental health professionals. In effect, the socializers responded to the problem of

distractibility as if it were a motivational problem rather than a maturational or instructional problem. Once again we see that compared with the instructors, the socializers are more oriented toward working with problem students, but not necessarily more effective in helping them to overcome their problems.

Differences between socializers and instructors were somewhat more extensive in the vignette responses than in the interview responses. Socializers were more often coded for the following: adopting improvement of mental hygiene or coping skills as a goal; locating the cause of the problem in interaction between internal and external factors rather than attributing causality solely to factors within the student; using special time spent with the teacher as a reward; supportive isolation; public "diagnosing" of the student's behavior or motives; third degree grilling techniques; involving the peers to pressure the problem student to change behavior; tension release techniques; changing the problem student's physical environment; changing the problem student's social environment; individual counseling designed to increase the problem student's insight (especially insight concerning the teacher's feelings); and citing classroom rules as justification for behavioral change demands. In contrast, instructors were coded more often for the following: responding to depicted problems with simple demands or imperatives unaccompanied by attempts to instruct problem students or change their attitudes or beliefs; attributing the problem solely to causes located within the student; viewing the problem as global (generalized across situations); omitting supportive behaviors from the response; including global personal criticism of the problem student; including some form of punishment in the response to the problem behavior; and proscribing or setting limits on the student's behavior.

Once again, the pattern of differences suggests that the socializers were more oriented toward working with problem students but not necessarily more

effective in doing so. The socializers were more likely to diffuse the blame for the problem behavior by mentioning factors such as poor parenting or generally poor social environments, and were more likely to acknowledge that some problems could have been caused at least in part by inappropriate teacher behavior. Socializers were also more likely to try to help problem students by improving their mental hygiene or coping abilities, more likely to supply them with rewards or provide supportive treatment, and less likely to berate them with global criticism or to punish them (although it should be noted that the punishments mentioned by the instructors usually involved staying after school, making restitution, or being referred to the principal, rather than physical punishment or other punitive reactions that might seem inappropriate). These differences all suggest that the socializers showed greater tolerance of and willingness to work with problem students than the instructors did.

However, it is also true that the socializers were more likely to publicly "diagnose" the behavior of problem students, to discuss their behavior during class meetings in an attempt to minimize peer support for it, and even to attempt to generate peer pressure against it. Superficially, some of the latter techniques resemble those suggested by Rudolf Dreikurs and by William Glasser. However, many of the teachers talked about implementing these techniques in ways that violated the basic philosophies underlying the writings of Dreikurs and Glasser (e.g., doing so in public rather than in private, and with greater emphasis on generating external pressures to force problem students to conform than on developing problem students' insights in ways that would induce them to change their behavior on their own without the need for external pressures).

Responses to particular vignettes mostly elaborated these general trends. In discussing the vignettes depicting achievement problems (failure syndrome, perfectionist, underachiever, low achiever), instructors were more likely to mention brief verbal interventions or attempts to pressure the students to

change their behavior, whereas socializers were more likely to mention interventions that involved shaping techniques or counseling designed to develop the student's insight. In responding to vignettes involving hostile-aggressive, passive aggressive, or defiant students, instructors were more likely to mention offering rewards for improved behavior and to call for involving the parents or school authority figures (either to support or to pressure the problem student), whereas socializers were more likely to threaten punishment, to publicly "diagnose" the student's behavior or motives, to mention third degree grilling techniques, or to try to change attitudes and beliefs through counseling or logical appeal. In responding to vignettes involving hyperactive or distractible students, the instructors were more likely to proscribe or set limits on behavior, to make logical or personal appeals to the student to change behavior, or to threaten punishment, whereas the socializers were more likely to talk about developing the student's self-concept or providing instruction, encouragement, or counseling. Finally, in responding to vignettes involving immaturity, rejection by peers, or shyness/withdrawal, both groups of teachers stressed attempts to manipulate student behavior through offer of reward or threat of punishment, but the socializers were more likely to emphasize reward than punishment and were more likely to talk about counseling the students to develop their insight as well.

In general, the responses of the socializers were consistent with their expressed role definitions, in that they indicated an orientation toward going beyond teaching-learning concerns in order to get to know their students as individuals and try to promote their personal adjustment and socialize their interpersonal behavior in addition to teaching them academic content. The socializers apparently spent more time and effort trying to reach problem students than the instructors, who usually concentrated on academics and confined their

responses to problem students to the articulation and enforcement of expectations for classroom conduct.

Good intentions were not enough, however. The data suggest that the socializers were no more effective than the instructors at dealing with problem students, and may even have been less effective in some respects. Theoretically, teachers who are highly effective in dealing with problem students should be willing and able not only to reach them through personalized individual counseling, but also to articulate and enforce clear expectations and take action to curtail unacceptable behavior when talk alone does not seem to be effective. The latter skills were more characteristic of the instructors than of the socializers studied in this research, underscoring once again the fact that measures of teachers' role definitions tapped the teachers' classroom styles or orientations, but not necessarily their effectiveness.

Small City Teachers vs. Inner-City Big City Teachers

Compared to the teachers in Small City, the teachers working in inner-city Big City faced significantly more difficult working conditions, on the average. Their school buildings were considerably larger, and lavatories and drinking fountains were located outside rather than inside their classrooms. Police guards were assigned to their buildings, entrance was restricted during school hours, and the buildings were cleared and locked by 4:00 p.m. Their class sizes were also significantly larger, and the observers more often mentioned crowding as a problem complicating these teachers' classroom management efforts. Furthermore, these teachers had less assistance from aides than the Small City teachers did.

There were a few differences between teaching locations, however, that may have countered this general tendency for classroom management problems to be more difficult or complicated in the inner-city Big City than in Small City.

For one thing, the Big City classes were more homogeneous. Their students all came from the immediate inner-city neighborhood and ability grouping was frequently used as the basis for assigning students to classes. In contrast, the Small City schools usually drew from a more ethnically and socioeconomically heterogeneous clientele, and those that drew from a more homogeneous middle class clientele usually had inner-city minority students bused to them. Furthermore, most of these Small City classes had mainstreamed students or other special students assigned to them, whereas this was true for only one of the classes in Big City. Thus, the Small City teachers faced more heterogeneous classes, although in the context of smaller class sizes and more assistance from aides.

Classroom observation data indicated that the Small City teachers were coded more often for signaling appropriate behavior, blaming students, and moralizing, whereas the Big City teachers were coded more often for exerting control by using eye contact, praising peers as a technique for modifying the behavior of target students, involving parents in dealing with problems, using humor, letting students know that they were keeping an eye on them, using problem-solving questions and techniques, using isolation or other segregated seating strategies with problem students, and appealing to the Golden Rule or to students' sense of empathy with others in justifying their demands for behavior change.

The observers reported generally similar styles and levels of success in managing the classroom for these two groups of teachers, although they rated the Big City teachers as slightly more authoritative and the Small City teachers as slightly more authoritarian (using Baumrind's, 1971, terms and definitions). Also, defiance following teacher intervention was observed in six Small City classes but in only one Big City class.

Given that the Small City teachers generally gave much more impressive interview responses than the Big City teachers did, these data from the classroom observers are puzzling. The observation data suggest that the two groups of teachers were much more similar than different in the types of strategies they used and the levels of success they achieved in managing their classrooms, but the differences that did occur made the Big City teachers appear somewhat more professional (more authoritative and less authoritarian) and effective (less likely to experience defiance when intervening) than the Small City teachers. It is possible, of course, that the inner-city Big City teachers actually were somewhat more professional and successful than the Small City teachers were, although this is difficult to believe given the extent and nature of the differences in responses to the interviews (to be described below).

At least two other possibilities come to mind as potential explanations for this apparent conflict in findings. First, different sets of observers worked in Small City and in Big City. The observers were trained by the same person using the same materials and methods, and occasional reliability checks were conducted during the course of data collection. Still, it is possible that some of the differences between the two groups of teachers in reported classroom management behavior could have been due to differences between sets of observers in the subjective criteria used for making ratings and frequency estimations (e.g., perhaps the Small City observers would code student defiance of the teacher or authoritarian behavior by the teacher on the basis of less evidence than the Big City observers would).

A second and more probable explanation for the apparent discrepancy between the findings from the classroom observers and the findings from the teachers' interview responses is that the classroom observation data concern strategies used and levels of success achieved in general classroom management rather than in dealing with troublesome individual students, so that the two

sets of data address somewhat different teacher tasks. Also, the classroom management data were influenced by differences in teachers' approaches to curriculum and instruction. In sharp contrast to the picture of chaos and uproar suggested by the "Blackboard Jungle" stereotype, the classrooms observed in inner-city Big City usually were described as extremely quiet and orderly (perhaps even too much so). A major reason for this was that much of the time in these classes was spent copying from the board or doing individual seatwork featuring dittos, workbooks, or other drill and practice activities.

In classrooms where teachers rely heavily on this approach to instruction and are successful in getting the students to concentrate on working on their assignments individually without interacting with one another, everyone soon settles into fixed routines, disruptive incidents are minimized, and the classroom can look very effective from a narrow classroom management point of view. However, teachers who rely heavily on this individualized seatwork mode tend to elicit less achievement gain from their students than teachers who provide active instruction in whole class and small group lessons (Brophy & Good, 1986). The Small City teachers provided more of this active instruction, as well as a greater variety of classroom activities, especially activities that allowed the students opportunities to talk to the teacher or to one another. Thus, the Big City teachers appeared to be effective classroom managers in the sense that they elicited student cooperation with their instructional programs, but those programs tended to overrely on a seatwork approach that restricted student behavior to a few familiar routines. In contrast, the Small City teachers used more varied and interactive approaches that were more instructionally beneficial but also made classroom management somewhat more complex and difficult. These differences illustrate the interplay between management and instructional decisions made by teachers, which in turn influence the nature of problem student behavior that is likely to occur in the classroom.

In any case, it is clear that the interview responses of the Small City teachers were much more impressive than those of the inner-city Big City teachers. These location differences were much larger and more consistent than the differences associated with role definitions, grade levels, or teacher gender. The Small City teachers' responses to the interview questions were generally longer and included mention of more strategies, especially strategies involving shaping, counseling, or providing support to the problem student. Consequently, their responses typically received higher coder ratings of probable effectiveness in coping with the problem than did the responses of the Big City teachers. On the average, the Small City teachers simply had much more to say in these interviews concerning general strategies for dealing with problem students, and what they said usually was more in keeping with the nature of the advice typically offered by experts.

Specifically, Small City teachers were coded more often for minimal intervention/redirection; supporting the problem student through physical proximity, voice tone, or eye contact; prescribing desirable behavior; praise; reward; counseling; developing the problem student's self-concept; class meetings and other group work; involving school authority figures to help in solving the problem; mention of goals involving shaping desirable behavior, helping the student to cope with the problem, or providing support and encouragement; mention of long-term problem solution strategies; mention of separate strategies linked to differentiated subtypes of the problem; and gathering a greater amount and variety of information about the problem student before deciding on what actions to take. In contrast, Big City teachers were coded more often for stating that nothing could be done about the problem; attempting to delegate responsibility for handling the problem to some other authority; failure to mention two or more subtypes of the problem; and appearing to be motivated by instructional concerns rather than concern about the problem student or other motives.

In general, the responses of the Big City teachers to a given type of problem student were similar in basic approach but briefer, less differentiated, and less impressive than the responses of the Small City teachers. There was little evidence of "separate but equal" styles of responding to problem students in these two groups of teachers; that is, rather than appearing to be equally responsive but relying on somewhat different strategies, the Big City teachers appeared to be generally less responsive to problem students than the Small City teachers did. There was some tendency for the Big City teachers to rely more on appeal, persuasion, and other "brief talking to" strategies and less on more extensive behavior modification or counseling strategies, especially with perfectionist, hostile-aggressive, and defiant students. There was also a tendency for Big City teachers to show more defeatism and low expectations by declaring that nothing significant could be done to improve the situation, especially for underachieving, passive aggressive, immature, and rejected students.

Group differences in responses to the vignettes were much less clear and consistent than the differences seen in responses to the interview. The general response categories indicated that for some vignettes the Big City teachers were more likely to fail to realize that the depicted problem was part of a chronic pattern rather than an isolated event. Nevertheless, for other vignettes the Big City teachers were more likely to be coded for making proactive (organized, programmatic) responses and less likely to be coded for making reactive (reacting only briefly to the immediate problem) responses to the vignettes. The Big City teachers were more likely to mention attempting to shape desirable behavior through rewards, whereas the Small City teachers were more likely to mention attempting to improve mental hygiene or coping skills. The Big City teachers were also more likely to make purely imperative responses that failed to contain instructional elements. There were no consistent

differences in accuracy of perception of the problem student, but the Big City teachers showed more congruence between their diagnoses of the reasons for problem students' behavior and their prescriptions for responding to this behavior. The latter difference may be somewhat artificial and misleading: The Small City teachers offered more hypotheses about the possible reasons for problem students' behavior, and more often described multiple strategies for responding to it, so they "put themselves at risk" for being coded for lack of congruence between diagnosis and prescription much more often than the Big City teachers did.

Attributional inference data indicated that the Big City teachers were more likely to attribute the problem to causes strictly internal to the student, whereas the Small City teachers were more likely to mention interactions between internal and external causes. Nevertheless, the Small City teachers were somewhat more likely to describe the problem as stable and global and to infer that the problem students could control their problem behavior, at least potentially. Finally, the Small City teachers were much more likely to believe that they could bring about significant improvement in the problem behavior than the Big City teachers were. The single largest and most consistent difference between these two groups of teachers occurred on this locus of control/sense of efficacy variable.

The Big City teachers were more likely to offer problem students rewards for improved behavior than the Small City teachers were, especially special privilege rewards. However, the Small City teachers were more likely to mention special time spent with the teacher as a potential reward for problem students. Big City teachers were also more likely to threaten problem students with punishment, and especially to talk about sending these students to the principal for punishment. The Small City teachers were more likely to mention punishments calling for the problem students to put in extra time or fulfill

extra requirements. Small City teachers also were much more likely to mention keeping students after school than the Big City teachers were (possibly because the Big City schools were cleared and locked by 4:00 p.m). The findings in this section parallel those of Moore and Cooper (1984), who reported that elementary grade teachers working in schools with lower socioeconomic status students or lower percentages of white students more often mentioned punishing students verbally or physically or sending them to the principal, but less often mentioned extra assignments as an effective disciplinary technique.

There were no general differences in the frequency of mention of supportive behaviors. However, the Big City teachers were more likely to mention involving parents or other adults to provide support to the problem student, whereas the Small City teachers were more likely to mention providing support to these students personally in the classroom by defending them against rejecting peers or by providing kid gloves treatment during times of stress. There were no significant differences in threatening or pressuring behaviors.

Big City teachers were coded more often for the following problem-solving strategies: attempting to delegate the problem to another authority; attempting to diagnose and eliminate the source of the problem; attempting to build the student's self-concept; attempting to develop and use the teacher-student relationship; involving the parents; and gathering information before taking action. Small City teachers were coded more often for brief management responses; attempts to release tension in conflict situations; prescribing or modeling desirable behavior; seeking student input regarding solutions to the problem; and attempting to develop problem students' insight into their own feelings or into the teacher's goals or feelings.

Finally, Big City teachers were much more likely to be coded for failing to make any behavioral demands at all, whereas Small City teachers were more likely to be coded for making demands but failing to provide rationales for

those demands. When the teachers did make demands and provide rationales, the Big City teachers were more likely to be coded for appealing to the student's pride or self-concept, whereas the Small City teachers were more likely to be coded for making a personal appeal ("Do it for me") or providing a logical analysis designed to persuade the student that the problem behavior was self-defeating.

In summary, the Big City teachers appeared to be less confident of their abilities to effect significant change in the problems depicted in the vignettes, and less oriented toward attempting to do so. Compared to the Small City teachers, the Big City teachers more often declared that nothing could be done; attempted to refer the problem to the principal, the parents, or external diagnosticians or treatment experts; or confined their responses to brief "talking to" strategies or threats of punishment. In contrast, Small City teachers were more likely to assume personal responsibility for solving the problem, and more likely to use a variety of strategies, especially strategies that called for personalized and extended interaction with the problem student (if Big City teachers talked about extensive private interactions with the problem student, they usually discussed these as occurring later during follow-up conferences with the student rather than on the spot following the problem depicted in the vignette). The latter difference may have appeared because the Small City teachers were more knowledgeable about coping with problem students than the Big City teachers were (if this can be inferred from their longer and richer interview responses), or more accustomed to coping with their troublesome behavior (because they favored approaches to classroom management and instruction that allowed students' personal and social characteristics to show themselves more clearly). However, the difference also may have appeared simply because the Small City teachers had smaller classes and more assistance from aides and thus were more often in position to take time to deal at length with a problem

on the spot rather than being forced to deal with it briefly and then attempt to follow up later after class.

In many ways, the differences between the Big City and Small City teachers' interview and vignette responses approximated the differences we had expected to find between teachers who emphasized instruction and teachers who emphasized student socialization in their role definitions. The Small City teachers showed more orientation toward assuming personal responsibility for working with problem students and taking the time both during and after class to do so. Their interview responses were notably longer and richer, their vignette responses suggested greater confidence in their abilities to bring about desired change, and both sets of responses suggested greater knowledge and ability to be articulate in talking about coping with problem students. These location group differences were much larger and more systematic than the role definition group differences reviewed in the previous section, and they suggest that the Small City teachers were notably more oriented toward and articulate about student socialization (in addition to instruction) than the Big City teachers were. However, it should be kept in mind that the observation data indicated that the Big City teachers were at least as effective in eliciting cooperation from their students as the Small City teachers were.

Early Grade (K-3) Teachers vs. Later Grade (4-6) Teachers

Comparisons of data from the teachers in the early grades with data from the teachers in the later grades yielded relatively infrequent significant differences, but most of the differences that did appear hung together to form a general pattern: The responses of the upper grade teachers were relatively more brief/verbal and demanding/threatening, whereas the responses of the lower grade teachers mentioned more varied and intensive problem-solving strategies and suggested a more sympathetic, supportive, and helpful stance toward the

problem student. This may have been due in part to certain advantages enjoyed by the lower grade teachers. Compared to the upper grade teachers, the lower grade teachers were slightly more experienced, worked in smaller schools, taught smaller classes that were less likely to be described by the observers as crowded, and more often taught classes that had been grouped homogeneously by ability.

Classroom observation data indicated that lower grade teachers were more often described as citing classroom rules or isolating problem students from their peers as behavioral interventions, whereas upper grade teachers were more often observed to punish/threaten/yell, to criticize/scold/use sarcasm, or to use humor. The lower grade teachers were more likely to state rules or expectations in attempting to justify or provide rationales for their behavioral demands, whereas the upper grade teachers were more likely to provide no rationale at all or to appeal to the student's sense of self interest by showing how misconduct leads to self-defeating consequences. Finally, the upper grade teachers were described as acting in an authoritarian manner a greater percentage of the time than the lower grade teachers.

The teachers' responses to the interviews and vignettes reinforce and elaborate the picture suggested by these observational data. The responses of the lower grade teachers tended to be somewhat longer and richer than those of the upper grade teachers, although these grade level differences were not nearly as great as the location group differences described previously. Both the interview data and the vignette data yielded the same general pattern of differences, however.

In the interview data, few differences were consistent and strong enough to reach statistical significance. These differences indicated that lower grade teachers were more likely to mention supporting the problem student through proximity, voice tone or eye contact, using shaping strategies,

attempting to diagnose and eliminate the source of the problem, and being motivated by instructional concerns. Upper grade teachers were more likely to be coded for use of a general approach to the problem that was confined to controlling or suppressing undesirable behavior without attempting to develop desirable behavior or solve the underlying problem. Weaker trends in the interview data indicated that the lower grade teachers were more likely to be coded for inhibiting problem behavior through proximity, eye contact, or voice tone; prescribing/telling/instructing/eliciting statements about desired or expected behavior; adopting treatment approaches designed to increase the problem student's insight or to identify and treat external causes of problem behavior; including long-term prevention or cure strategies in their response; and being motivated by concern about group functioning and safety or concern about the problem student. Similarly weak trends indicated that the upper grade teachers were more likely to be coded for being motivated by survival needs or concern about themselves and for using the strategies of criticism, appeal/persuasion, and punishment (as an immediate response to misbehavior rather than as a backup or a last resort).

Significant group differences in the vignette responses were more frequent but similar in pattern. In the general response categories, the lower grade teachers were more likely to be coded for making proactive (organized, programmatic) responses and for mentioning shaping goals, whereas the upper grade teachers were more likely to be coded for making avoidant responses (attempting not to deal with the problem at all) and responses that were purely imperative (making behavioral demands on the problem student without providing rationales or including instructive elements).

Attributional inference data showed that the lower grade teachers were more likely to expect generalized improvements to occur following their intervention efforts, whereas upper grade teachers were more likely to describe

problem students as at least potentially able to control their problem behavior, and thus as liable to be held personally responsible for it.

The lower grade teachers mentioned more rewards and supportive behaviors. In particular, they were more likely to mention teacher reward (special time spent with the teacher as a reward) and the supportive behaviors of global personal praise, encouragement, supportive isolation, involving peers to support the problem student, providing extra or special instruction, and modeling acceptance of the problem student. There were no consistent differences in frequency or type of punishment mentioned. However, the upper grade teachers were more likely to mention global personal criticism of the problem student. The lower grade teachers, although less likely to mention threatening/pressuring behaviors in general, were more likely to mention involving peers to pressure the problem student to change behavior.

The categories concerning commonly mentioned strategies indicated that the lower grade teachers mentioned more such strategies and that a greater proportion of these were behavior modification strategies. Specifically, the lower grade teachers were coded more often for offering rewards for improved behavior, prescribing or modeling desirable behavior, changing the problem student's social environment, and using strategies designed to build the student's self-concept. In addition, the lower grade teachers were coded more often for strategies designed to develop the problem student's insight (especially insight into his or her own behavior and its consequences) and for providing rationales to justify their demands for behavioral change (especially citing the classroom rules or offering logical analyses).

Taken together, the data indicate that the upper grade teachers were more likely to respond to problem students in an authoritarian fashion, without much attempt to sympathize, encourage, or provide support. Their responses to particular incidents were more likely to be confined to a brief "talking to,"

perhaps combined with an attempt to appeal to or reason with the problem student, threat or delivery of punishment, or personal criticism of the problem student. In contrast, lower grade teachers were more likely to report responding with more personalized and time-consuming strategies that were more sympathetic or supportive in tone and that included more long-term elements designed to identify and treat diagnosed causes of the problem, shape desirable behavior through rewards and behavior modification strategies, or assist the student by providing instruction in or modeling of desired behavior or more effective coping techniques.

Although not specifically predicted, these grade-level differences are not surprising. Grade-level comparisons generally suggest a gradual transformation from relatively warmer and more nurturing forms of teacher-student interaction in the early grades toward relatively less personal and more academically focused interactions in the later grades (Brophy & Evertson, 1978; Brophy & Good, 1986). More specifically, Brophy et al. (1981) reported reductions across grades 2-5 in teachers' use of praise, reward, and various behavior modification techniques, as well as in time spent in nonacademic interactions with students. Also, DeFlaminis (1976) reported that junior high and high school teachers used more methods involving coercive power assertion and fewer involving offer of reward, negotiation of agreements, or other noncoercive methods in responding to student misconduct than did elementary level teachers. This suggests that the trends reported here continue through higher grade levels.

Like the differences between the Small City teachers and the inner-city Big City teachers (but to a lesser extent), the differences observed between the early grade teachers and the later grade teachers resemble what might have been expected from a comparison of teachers who favored the socializer role with teachers who favored the instructor role. Although there were important differences between the groups, it is fair to say that inner-city Big City

teachers, upper grade teachers, and "instructors" had a common tendency to restrict their reactions to problem students' behavior to brief impersonal calls for behavior change backed by threat of punishment if necessary, whereas Small City teachers, lower grade teachers, and "socializers" had a common tendency to respond in more personalized, extended, and supportive ways to their problem students and to use a greater variety of problem solving strategies in doing so. The stereotypical upper grade "instructor" teaching in inner-city Big City was likely to make relatively minimal responses to problem behavior and to refer problem students to the school administration for discipline if they did not respond to a brief "talking to" backed by threat of punishment. In contrast, the stereotypical early grade "socializer" teaching in Small City was likely to spend considerable time talking to the problem student during or after school, seeking to diagnose and treat causes so as to bring about a long-term solution rather than merely to suppress or control problem behavior, and supplementing brief "talking to" strategies with support and encouragem behavior modification strategies, or extensive counseling designed to develop insight or equip the problem student with needed information or coping skills.

Male Teachers vs. Female Teachers (Grades 4-6 Only)

Our final comparisons of different categories of teachers are based on teacher gender. Because all of the male teachers included in the study taught in grades 4-6, teacher gender differences would have been confounded with grade level differences if data from the male teachers had been compared with data from all of the female teachers. To avoid this problem, data from the (female) teachers working in grades K-3 were excluded, and the comparisons involved male teachers in grades 4-6 vs. female teachers in grades 4-6.

The interview responses of the female teachers were somewhat longer than those of the male teachers and mentioned more strategies, more teacher motives,

and more sources of information that would be consulted in deciding what to do about problem students. More specifically, the female teachers were more often coded for praise of the problem student, involvement of the parents to provide support or help solve the problem, involvement of school authorities to provide support or help solve the problem, long-term prevention or cure strategies, mention of subtypes of a particular type of problem student and of differentiated strategies linked to these subtypes, and concern about the problem student as a motive for teacher action. To a lesser extent, the female teachers' interview responses were more likely to be coded for shaping or behavior modification strategies (especially extinguishing through ignoring), counseling strategies, and in general, a greater variety of strategies. Male teachers were slightly more likely to be coded for using the strategy of minimizing the problem students' stress or embarrassment in conflict situations.

The vignette responses yielded even fewer differences. There were no differences in general approach or in attributional inferences. There also were no differences in frequency of mention of rewards, punishments, or supportive behaviors, although male teachers were more likely to mention threatening or pressuring behaviors. Male teachers were also more likely to mention special privilege rewards and to mention punishing by imposing extra requirements. Female teachers were more likely to mention providing encouragement to problem students and to talk about specifically criticizing their problem behavior. These few differences suggest that the male teachers were more impersonal and the female teachers more personal in responding to problem students.

The data on commonly mentioned strategies indicated that male teachers were more likely to be coded for making no response at all (avoiding dealing with the problem), attempting to diagnose and eliminate the source of the problem, involving the parents in the problem, and failing to make any demands for behavioral change on the problem student. Female teachers were coded more

often for getting additional information before taking action, prescribing or modeling desirable behavior or coping skills for the problem student, and imposing demands for behavioral change accompanied by rationales justifying those demands. In addition, a higher proportion of the female teachers' total response was devoted to behavior modification strategies.

Taken together, the data suggest that, compared with the male teachers in grades 4-6, the female teachers in grades 4-6 provided slightly longer and more impressive interview responses. They would be more likely to take action and get involved personally in seeking long-term solutions to problems, to be concerned more personally about the problem student, to be personal rather than impersonal in dealing with that student, to gather additional information and get outside help in developing a strategy for responding to the problem, and to use a greater variety of response strategies. This sounds like a strong and clear-cut pattern of gender differences in the teachers' responses, but it should be kept in mind that the previous sentence is a summary and extrapolation based on just a few barely significant differences and nonsignificant trends in data drawn from just 17 male teachers and 31 female teachers. Also, 10 of the 17 male teachers were from Big City whereas 19 of the 31 female teachers were from Small City, so these gender differences are partly confounded with the more powerful location differences reported earlier.

Still, the gender data are interesting because they replicate and extend the findings concerning teacher gender differences in classroom management orientation reported by Smith (1981) and because they confirm expectations based on what is known about traditional gender role socialization in our society (which tends to orient females toward being more nurturant and more personal rather than impersonal in dealing with others, and more cooperative rather than individualistic in solving problems). However DeFlaminis (1976) found no such gender differences in his study, and readers should bear in mind that the

differences reported here were very minor, and that on the whole, male teachers and female teachers were much more alike than different in their responses to the interviews and vignettes.

Relationships Between Teachers' Strategy Codes and Their Effectiveness Ratings

The fact that there were positive but unexpectedly low correlations among the various ratings of teachers' effectiveness in coping with problem students meant that we had to run a great many different analyses of relationships between strategy codes and teacher effectiveness ratings and then make decisions about which data sets to emphasize in reporting the results. Analyses of the relationships of the various teacher effectiveness ratings to one another and to measures taken from the observation and interview data (discussed earlier in this report) suggested the following:

1. The principals' ratings of the teachers as either outstanding or average appeared to reflect the principals' school organization perspective and to be based primarily on the teachers' reputations for success in managing the classroom and controlling student behavior (especially disruptive and aggressive behavior).

2. The observers' ratings appeared to reflect observer empathy with the students in the classes and to be based primarily on the teachers' success in creating a positive classroom atmosphere and obtaining willing compliance from students.

3. The coders' ratings were based on the typescripts of the teachers' responses to our interview questions. They appeared to be heavily influenced by the length and cognitive complexity of the response and by degree to which it included mention of socialization and problem-solving strategies commonly espoused by humanistically oriented mental health professionals.

4. The teachers' self-ratings, although correlated modestly with the principals' ratings, showed only sporadic and unpatterned correlations with other variables. Furthermore, a single factor accounted for 88% of the common variance in these teacher self-ratings, suggesting that they are best viewed as a single 12-item scale measuring teachers' levels of confidence in their abilities to deal with problem students in general, rather than as 12 independent scales each measuring teachers' self-perceived ability to deal with a particular type of problem student.

In short, the principals', observers', and coders' ratings all seemed to convey some reliable (but different) information about teachers' effectiveness in handling problem students, but the teachers' self-ratings did not. Consequently, we decided to eliminate the teachers' self-ratings from further systematic analysis but to investigate the relationships between the teachers' interview and vignette responses and the effectiveness ratings of the principals, the observers, and the coders. This was done by correlating scores from the coding ("0" vs. "1" scores for individual coding categories, as well as sum and proportion scores computed from these individual category scores) with the principals' ratings (2-point scale), the observers' ratings (5-point scale), and the coders' ratings (4-point scale). Correlations with the coders' ratings were done both for the sum of the coders' ratings for a particular teacher across all 12 types of problem student and for the coders' ratings of probable effectiveness of the teachers' responses to the particular type of problem student addressed in a particular coding system.

These correlations were computed not only for the sample as a whole but for the two grade level subsamples (K-3 vs. 4-6) and the two location subsamples (Small City vs. Big City). This allowed us to search for contrasts in what appeared to be effective (e.g., to be found in the responses of the higher rated teachers significantly more often than in the responses of the

lower rated teachers) between the early grades and the later grades and between Small City and Big City.

These basic correlational analyses were supplemented in two ways. First, in addition to computing correlations linking the teachers' strategy codes to their principals' ratings and observers' ratings considered separately, we computed additional statistics comparing extreme groups of teachers identified by considering the principals' and observers' ratings in combination with each other. These analyses compared the 24 teachers who were both classified as outstanding by the principals and rated high (either 4 or 5 on the 5-point scale) by the observers with the 21 teachers who were both classified as average by the principals and rated low (1 or 2 on the 5-point scale) by the observers. Thus, these extreme groups analyses compared teachers that both the principals and the observers agreed were highly effective in coping with problem students with teachers that both the principals and the observers agreed were less effective.

A second set of supplementary data was developed using the scores from the special vignettes that had been designed to assess the degree of congruence between teacher self-report and teacher behavior. The teachers' responses to these special vignettes were coded for whether or not they showed congruence with the teacher behaviors described in the observers' reports of the incidents on which the special vignettes had been based. Of the 91 teachers who could be scored for both special vignettes, 32 showed congruence between self-report and observed behavior for both vignettes, 35 showed congruence on one but not the other, and 24 did not show congruence on either.

We had expected that low congruence might reflect a social desirability set in the responses of certain teachers to our vignettes (e.g., that teachers who often used threats, punishments, or other strategies for responding to problem students that tend to be disapproved by mental health professionals would

supply verbal responses to our vignettes that pictured themselves as relying on more commonly recommended strategies). Surprisingly, the data did not bear out this expectation. In talking about how they would handle hostile-aggressive students, for example, it was the low-congruence teachers who more often mentioned threat or punishment, rough treatment, being firm, isolating the student from peers, or generally keeping a closer watch on the student. Meanwhile, the high-congruence teachers more often mentioned eliminating the source of the problem, allowing the student to ventilate, and listening sympathetically.

Other data indicated that congruence scores were correlated positively with the observers' ratings of teacher effectiveness in dealing with problem students (correlations with principals' ratings were not significant). In general, the low-congruence teachers tended to be both less impressive and less socially desirable in their responses. Thus, these teachers' lack of congruence was not due to attempts to restrict themselves to socially desirable responses. Instead, their low congruence likely was due to lack of adequate memory for their own strategies or (more probably) lack of any consistent strategies at all. The low-congruence teachers appeared to be primarily reactive, authoritarian, and control/punishment-oriented in dealing with problem students (which is to be expected from teachers who lack systematic ideas about understanding and responding to such students).

Even though the low-congruence teachers did not show the expected social desirability bias, correlational analyses were performed both with and without the low-congruence teachers' data included so that the influence of teacher congruence on the findings could be assessed. Specifically, in addition to computing correlations for the sample as a whole, we also computed correlations for the "congruent subgroup" composed of the 67 teachers who showed congruence on at least one of their vignettes (thus excluding the 24 teachers who did not show congruence on either vignette plus the teachers for whom complete

congruence data were not available). The two sets of correlations covaried closely (as expected because the 67 teachers in the congruent subgroup also constituted over two-thirds of the entire sample of 98 teachers). More importantly, when discrepancies did occur, they did not form clear patterns or result in any significant changes or additions in the findings and interpretations based on the analyses for the total sample. Consequently, data from these congruent subgroup analyses will not be included in our forthcoming reports on relationships between teachers' strategy codes and their effectiveness ratings.

Neither will the correlations between the strategy codes and the coders' effectiveness ratings be included. This is because the significant relationships that appeared in these correlations routinely conformed to a single pervasive pattern: Positive correlations were seen for teacher strategies that involved providing support and assistance to the problem student (especially strategies espoused by humanistically oriented psychotherapists such as Dreikurs or Gordon), and negative correlations were seen for strategies involving pressuring, threatening, or punishing the student. The consistency of these coder ratings correlations with one another and with theoretical concepts rooted in humanistic psychology was reassuring, but the fact that the coders appeared to adopt the purview of a mental health professional treating an individual client rather than the purview of a teacher working within the usual classroom constraints was troubling. It appeared that the coders tended to overestimate the efficacy of certain supportive behaviors and counseling techniques that are not very effective with certain types of students (such as hostile-aggressive students, for example), and to underestimate or fail to take into account the fact that teachers need to maintain control of the classroom and set firm limits on disruptive or aggressive behavior. In any case, since almost all of the significant correlations of teachers' strategy codes with

coders' ratings of teachers fit the pervasive pattern described above, there was no need for formal presentation of these data in tables.

Compared to their correlations with the observers' ratings, the correlations of the teachers' strategy codes with the principals' ratings formed more consistent patterns, made more theoretical sense, and appeared to reflect more consistently the feasibility limits imposed by the constraints within which teachers must work. This was to be expected, given the data reviewed earlier in the present report suggesting that the principals' ratings were generally more valid and based on more directly relevant information about the teachers' handling of problem students than the observers' ratings were. However, we had reason to believe that some principals put too much emphasis on teachers' abilities to control disruptive or aggressive students during conflict situations and not enough on their abilities to help such students develop more desirable attitudes and better coping skills. We also had reason to believe that the principals placed more emphasis on the teachers' skills in handling disruptive and aggressive students than on their skills in assisting other problem student types (failure syndrome, perfectionist, immature, shy/withdrawn) that appear to require sympathy and encouragement more than control or discipline. The observers' ratings, on the other hand, appeared to have taken these teacher characteristics into account, at least indirectly.

These considerations led us to use two sources of data as criterion scores for analyses linking teacher strategy codes to teacher effectiveness ratings: the principals' ratings and the extreme groups designations. Consequently, in forthcoming reports on teachers' responses to each of the 12 types of problem student addressed in the study, teacher strategy codes will be considered significantly associated with teacher "effectiveness" in handling problem students if they either (a) show a significant correlation with the principals'

ratings or (b) show a significant group difference in the extreme groups comparison.

In general, these analyses indicate that the higher rated teachers show more willingness to become personally involved in working with problem students, more confidence in their ability to elicit significant improvement in the problem behavior, and a richer description of long-term prevention or solution strategies (development of personal relationships with problem students, provision of support and encouragement, instruction in or modeling of more desirable behavior or coping skills, resocialization of attitudes and beliefs, etc.) that go beyond mere attempts to control problem behavior through limit setting and threats of punishment. Interesting qualifications and elaborations on these general findings appear in the findings for each individual problem student type, however, and contrasts within the findings for each pair of vignettes show how general strategies interact with situational and context factors when teachers respond to particular incidents of problem behavior. Contrasts between what appears to be effective in the early grades vs. in the later grades and in Big City vs. Small City appear in these findings as well. The data will be presented and discussed in detail in 12 forthcoming reports, one for each problem student type.

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